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ABSTRACT

The objectives of the Pre-Kindergarten Program were to give children in poverty areas of New York City opportunities for intellectual growth that would improve their later classroom performance, help them attain a positive self-image and a sound attitude toward learning, increase parental interest in their children's school progress and improve home-school cooperation. Of the 9,240 children enrolled 49% were Negro and 40% were Spanish-speaking. For program evaluation, questionnaires were completed by pre-kindergarten teachers and paraprofessionals, by kindergarten teachers, and by parents. Sample pre-kindergarten and kindergarten classes were observed and tested, to determine whether children who had attended pre-kindergarten differed from others, and how well the kindergartens build upon children's earlier learning experiences. Special evaluative instruments, the Pre-Kindergarten Inventory and the Kindergarten Inventory, were developed. The most significant result of the program was the pupils' success in learning basic concepts and fundamental discriminations helpful in later school work. It is recommended that the program be continued and extended to more children in poverty areas. (NH)

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PS 004116

FOREWORD

This is the evaluation report for the New York City Board of Education "Pre-Kindergarten Program" for the 1968-69 school year. This program, evaluated for the second successive year by The Psychological Corporation, was initiated, developed and substantially funded under Title I of the federal Elementary and Secondary Education Act.

David L. Crystal had principal responsibility for conducting the evaluation study. Helen M. Rausch and Susan M. Shimmerlik provided major assistance in gathering the field information, analyzing the findings, and preparing the manuscript. David Loth also contributed substantially to the preparation of the manuscript for this report. Jerome Rosenswaike was the editorial assistant.

The following five specialists in early-childhood education served as evaluation consultants for the study: Margaret M. Devine, Mills College; Bernice H. Fleiss, Hunter College; Dorothy W. Gross, Teachers College, Columbia University; Blanche O. Persky, New York University; and Margaret V.S. Yonemura, Queens College. Dr. Fleiss served as chairman for this group of consultants.

The evaluators express their appreciation for the excellent cooperation they received from the Bureau of Educational Research and the Bureau of Early Childhood Education of the New York City Board of Education, and especially to teachers and other staff members in the schools that were selected for intensive observation.

SYNOPSIS

The Pre-Kindergarten Program gave 9,240 children in poverty areas of New York City's five boroughs valuable and beneficial learning experience during the 1968-69 school year. The children were enrolled in 616 classes held three hours a day and taught by 401 teachers in 188 schools. Each class had 15 pupils, and usually three paraprofessionals. Most of the teachers had one morning and one afternoon class.

The objectives of the program were to give the children opportunities for intellectual growth that would improve their later classroom performance, to help them attain a more positive self-image and a sound attitude toward learning, to increase parents' interest in their children's school progress, and to improve home-school cooperation.

For evaluation, questionnaires were prepared and distributed to all pre-kindergarten schools that did not receive New York State funds. Completed forms were returned by 173 pre-kindergarten and 419 kindergarten teachers, 419 pre-kindergarten paraprofessionals, and a sample of 191 parents. Lengthy interviews were held with 26 teachers, both pre-kindergarten and kindergarten, and with others connected with the program. A sample of 20 pre-kindergarten classes conducted by 10 teachers and enrolling 300 pupils was selected for detailed observation and for individual testing by several different instruments. A sample of kindergarten pupils was similarly tested, and their classes were observed. This year, the evaluation was extended to kindergarten to determine whether children from the pre-kindergartens differed from others, and how well kindergartens built upon the earlier learning experiences. A special instrument, the Kindergarten Inventory, was developed for this study, paralleling the Pre-Kindergarten Inventory that was constructed last year.

The evaluators found the pre-kindergarten classrooms bright, attractive, and generally well supplied and furnished. Exceptions to this in some classrooms were a lack of blocks and space for block building, of cubbies, tape recorders, and library books. More playground space and equipment were needed.

Almost all the observed teachers were warmhearted, concerned, and capable. The evaluators noticed that the teaching techniques of many had improved during the course of the year, although more large-group instruction than is desirable was observed. The latter condition may be attributable in part to the teachers' eagerness to make up for time lost during the fall strike. Paraprofessionals seemed to work harmoniously with the teachers, and increasingly so as the year advanced. Aides who had been in the program previously helped more in teaching than the newcomers did. The training of the paraprofessionals would have been more effective if it had been started earlier in the year.

The children--49% Negro and 40% Spanish-speaking--were chosen by effective selection procedures to achieve the objective of enrolling pupils who had little opportunity for learning in their home environments. Many more children of equal need could have been enrolled if funds had permitted the addition of more classes.

However, because children in a program of this sort require much individual attention, the cost per pupil would not decline with increased enrollment. Any significant expansion, therefore, would probably require a proportional increase in the program's budget.

The pupils' progress was about the same this year as in 1967-68. The percentage equivalent of their average total score on the Pre-Kindergarten Inventory was 77, an average that was pulled down by the poor performance of Spanish-speaking children, for whom little provision was made to overcome their language handicap. The most significant result of the program was the pupils' success in learning basic concepts and fundamental discriminations that will help them in later school work. By the end of the school year, their progress in this respect was indicated by their ability to handle simple mathematical ideas, to identify colors and shapes, and to make use of a few elementary scientific principles. Generally, the accomplishments of the program were highly praised by those who came into contact with it.

In the kindergarten follow-up study, one-fourth of the classes were composed of children who had attended pre-kindergartens, one-fourth consisted of children who had not, and one-half were mixed. The study pointed up the effectiveness of the Pre-Kindergarten Program especially where pupils who had been in it were kept together in kindergartens.

The evaluators recommended that the Pre-Kindergarten Program be continued and extended to cover all children in poverty areas. Some of the numerous suggestions offered were directed toward improvements in supplies and equipment, staff orientation and in-service training, and stimulation of parent interest. Also included were proposals for more effective work with Spanish-speaking children and for better articulation of the Pre-Kindergarten and Kindergarten Programs.

TABLE OF CONTENTS

Chapter | Page

Foreword i

Synopsis iii

List of Tables vii

1. Introduction 1

2. Evaluation Objectives, Procedures, and Instruments 4

3. Implementation of the Pre-Kindergarten Program 7

4. Implementation of the Kindergarten Program in Relation to the Pre-Kindergarten Program 19

5. Effects of the Program on the Pre-Kindergarten Children 24

6. Pre-Kindergarten Inventory 26

7. Teachers' Ratings of the Pre-Kindergarten Children on the Developmental Scales 39

8. Effects of the Program on Kindergarten Children Who Went to Pre-Kindergarten 42

9. Kindergarten Inventory 44

10. Teachers' Ratings of the Kindergarten Children on the Developmental Scales 61

11. Evaluative Overview 64

12. Interviews with District Superintendents 76

13. Summary and Recommendations 78

Appendix

A. Statistical Tables 88

B. Questionnaires 99

LIST OF TABLES

Table **Page**

1. Percentages of Correct Responses to the Introductory Questions of the Pre-Kindergarten Inventory 29
2. Percentages of Correct Responses to the Body Parts Items of the Pre-Kindergarten Inventory 30
3. Means and Standard Deviations of the Pre-Kindergarten Inventory Scores 30
4. F-Ratio Reflecting Effect of Language Background Factor on Performance on the Pre-Kindergarten Inventory 31
5. Percentages of Children Correctly Responding to Each of the Color Items 31
6. Percentages of Children Passing Each of the Items on the Basic Concepts Subtest 32
7. Percentages of Children Correctly Responding to Each of the Shapes Items 33
8. Percentages of Correct Responses on the Mathematics Section of the Pre-Kindergarten Inventory 34
9. Percentages of Children Passing Each of the Items on the Science Section 35
10. Percentages of Responses on the Self-Image Section of the Pre-Kindergarten Inventory 36
11. Mean Ratings for Pre-Kindergarten Children on the New York Child Development Scales 40
12. Percentages of Correct Responses to Introductory Questions of Kindergarten Inventory 45
13. Percentages of Correct Responses to the Body Parts Items of the Kindergarten Inventory 46
14. Means and Standard Deviations of the Kindergarten Inventory Scores 47
15. Mean Scores on the Kindergarten Inventory, by Language Background and Pre-Kindergarten Experience, With T-Ratios for Subgroup Differences 48
16. Variables Significantly Related to Performance on the Kindergarten Inventory 48
17. Percentages of Correct Responses to the Color Items of the Kindergarten Inventory 49
18. Percentages of Correct Responses to the Shades Items of the Kindergarten Inventory 50
19. Percentages of Correct Responses to the Basic Concepts Items of the Kindergarten Inventory 51

LIST OF TABLES (Cont'd.)

Table | Page

20. Percentages of Correct Responses to Items on Shapes Section of Kindergarten Inventory 52
21. Percentages of Correct Responses to Items on Mathematics Section of Kindergarten Inventory 53
22. Percentages of Correct Responses to Pre-Reading Items of Kindergarten Inventory 54
23. Percentages of Correct Responses to Science Items of Kindergarten Inventory 55
24. Percentages of Responses to Pictures in Self-Image Section of Kindergarten Inventory 57
25. Mean Rating Values on the New York Child Development Scales for the Children in the Follow-up Study 61
26. T- and F-Ratios Reflecting Effects of Prior School Experience, Language, and Sex Factors on Rating on New York Child Development Scales (Follow-up) 62
27. Developmental Scale Items Passed By At Least 50% of the Pre-Kindergarten Children Tested 67
28. Pre-Kindergarten Inventory Items Passed By At Least 50% of the Children Tested 69

Appendix

29. Percentages of Correct Responses on Individual Items of the Pre-Kindergarten Inventory 89
30. Percentages of Correct Responses on Individual Items of the Kindergarten Inventory 90
31. Class Means on Pre-Kindergarten Inventory (Raw Scores) 93
32. Percentage Distribution of Responses to Items in Teacher's Questionnaire 94
33. Percentage Distribution of Responses to Items in Kindergarten Teacher Questionnaire 95
34. Percentage Distribution of Responses to Items in Teacher Aide, Family Worker, and Family Assistant Questionnaire 96
35. Percentage Distribution of Responses to Items in Parent's Form 97

CHAPTER 1

INTRODUCTION

For the fourth successive year (1968-69), the New York City Board of Education conducted hundreds of pre-kindergarten classes for four-year-olds in disadvantaged areas of the city. The aim of this program is to give children certain educational advantages that were once enjoyed only by those whose parents could afford to pay nursery school fees. This program is geared to the widely recognized need for early learning experiences that will help socially and economically handicapped youngsters overcome the effects of their impoverished backgrounds.

The program is substantially subsidized by funds supplied under Title I of the Federal Elementary and Secondary Education Act.

Description of the Program

The Pre-Kindergarten Program of 1968-69 was essentially a continuation of the 1967-68 program, with emphasis again directed toward the child's learning in a free classroom climate that fosters and encourages exploration and investigation. Within this setting, the classroom program is intended to meet the developmental needs of the young child, while providing the intellectual stimulation and training in basic skills that will enable him to benefit fully from later educational experiences. The program also aims to encourage the community to become involved in the educational process. Neighborhood residents are drawn into the program as paraprofessional aides, and community resources are utilized extensively. In turn, the program offers a wide range of services, including medical and dental care for the children, consultations with parents, and referrals for psychological assistance. A series of training sessions for professional staff members and paraprofessionals was introduced as a new aspect of the program this year.

During the 1968-69 school year, the Pre-Kindergarten Program registered approximately 9,240 children in 188 schools in the five boroughs of New York City. It employed 401 teachers, most of whom had both morning and afternoon classes, for a total of 616 classes. Each class had about

15 children, who attended daily three-hour sessions for the entire school year. The team for each class consisted of one teacher and three paraprofessionals: a teacher aide, a family assistant (social-service worker), and a family assistant. Professional personnel assigned to the program included early childhood education supervisors, teams of speech teachers, and clinical teams.

Review of the 1967-1968 Pre-Kindergarten Program Evaluation

Last year, 9,330 children were enrolled in 622 pre-kindergarten classes in 179 poverty area schools. The program's plans and objectives were in general as described above. The major evaluation findings that were cited in The Psychological Corporation's evaluation report of October, 1968, were:

1. Ratings, observations, questionnaires, and tests yielded the following indications of the program's accomplishments at the end of the school year:

   (a) The children showed substantial knowledge in the cognitive areas measured.

   (b) The children's language skills were above average, according to their teachers, although Spanish-speaking pupils were not rated as highly in this area as were the other children.

   (c) Parents reported an increase in their children's verbalizations.

   (d) The children's social and emotional development was quite good, according to their teachers' ratings.

2. At the end of the school year, the pupils generally showed greater awareness of themselves as individuals, and their self-image apparently had been enhanced. The parents reported that the children were generally happier at the end of the school year than they had been at the beginning.

3. Increased parental involvement in the children's education was indicated by well-attended parent meetings and by parents' help in making classroom materials and clothing for needy children. Success in this part of the program led to a recommendation that parents also take part in special events such as chaperoning all-day trips, and that teachers devote more time during their one free Monday each month to visits with parents.

Several weaknesses were noted, and these recommendations were proposed to correct them:

1. Remedy inadequacies in planning and preparation, especially by allotting more time for planning daily schedules, selecting paraprofessionals earlier, and providing more adequate training for both paraprofessionals and teachers.

2. Improve the variety and quality of food for the children's lunch, and make better use of lunch periods for learning opportunities.

3. Provide more books, records, and outdoor play equipment.

4. Since Spanish-speaking children appeared to be making relatively slow progress in the development of English language skills, suggestions were offered for several approaches that might improve this phase of the program. These included increasing the use of bilingual paraprofessionals and adding to the Pre-Kindergarten Curriculum Guide sections dealing with the development of the English language skills of Spanish-speaking children.

Objectives of the Program

The main objectives of the Pre-Kindergarten Program, as specified in the project proposal for 1968-69, are summarized as follows:

1. To improve classroom performance by providing greater opportunities for intellectual growth through the development of listening-speaking skills, first-hand experiences, and experimentation with materials and equipment
2. To improve social, emotional, and physical development by helping the children to attain a positive self-image and aiding in the creation of a sound attitude to school and learning
3. To increase interest of parents in their children's school progress and ability to succeed, and to increase home-school cooperation

CHAPTER 2

EVALUATION OBJECTIVES, PROCEDURES, AND INSTRUMENTS

Both the process and product aspects of the program were evaluated. In the process evaluation, attention was directed toward appraising the project's implementation of the objectives and plans that had been specified in the proposal. Product evaluation was mainly concerned with the program's effects on the participating children and their parents.

The evaluation study was extended to the kindergarten level this year to determine whether the children who had been in the Pre-Kindergarten Program last year differed from the others with respect to social, emotional, linguistic, and cognitive development. In addition, the evaluators sought to appraise the success of the kindergartens in building upon the training of the pre-kindergarten children.

To gain a broader base of information about the Pre-Kindergarten Program, questionnaires were sent to all 151 pre-kindergarten teachers and their paraprofessionals in the 349 schools that were receiving E.S.E.A. Title I funds, but not New York State funds, for the Pre-Kindergarten Program. These questionnaires, which were essentially similar to those that had been developed for last year's evaluation, asked for opinions about the ongoing program and its effect on the children and parents.

Consistent with last year's procedure, questionnaires were also sent to the parents of the children in the sample pre-kindergarten classes to ascertain their impressions of the program's effectiveness.

Copies of each of the questionnaires that were used in the evaluation study this year will be found in the Appendix.

The appraisal of the Pre-Kindergarten Program required intensive study of its actual operations. This called for detailed classroom observations, individual testing of children, collection of record data, and interviews with numerous staff members. The personnel and time required for this intensive, individualized study necessitated a sampling approach to keep within the evaluation budget. Therefore, a sample of schools deemed representative of the program and of schools in the city's high-density, poverty areas was chosen, with the approval of the project director.

The pre-kindergarten sample consisted of ten schools, including only two that had been in last year's evaluation sample. The morning and afternoon classes of one pre-kindergarten teacher in each of the schools made up the sample group of 300 children.

The pre-kindergarten classes in the sample were visited in February and again in May by five early childhood education specialists (identified in the FOREWORD) who served as consultants to The Psychological Corporation. During their visits, they observed the implementation and operation of the program. An observation guide was used to insure some measure of uniformity of coverage. In addition, the consultants interviewed the classroom teachers during the first round of visits.

In conjunction with the kindergarten follow-up study, newly developed questionnaires were sent to all the kindergarten teachers in the Title I Pre-Kindergarten Program schools that were not receiving New York State funds. These teachers were asked to give information or opinions about the relationships between the pre-kindergarten and kindergarten curricula, and to appraise the effects of the Pre-kindergarten Program on the children in their classes who had been in that program last year.

For the kindergarten follow-up study, the evaluation sample consisted of one morning and one afternoon class in ten of the fifteen schools in last year's sample. This took in approximately 500 children in the 20 classes of 16 teachers. Some classes consisted entirely of children who been in the Pre-Kindergarten Program, some had no children with that background, and others were mixed.

The evaluators met with the director of the Bureau of Early Childhood Education and various members of her staff to obtain suggestions and guidelines for the pre-kindergarten evaluation and the kindergarten follow-up.

Staff members of The Psychological Corporation observed the kindergarten classes during February and May, 1969. The record forms they used included a log of daily classroom activities, an observation guide, and a materials checklist. Kindergarten teachers were interviewed during the February visits to learn about their impressions of possible differences between the children who had been in the Pre-Kindergarten Program and those who had not.

PS 004116

Evaluation of the children's progress toward the goals specified in the Curriculum Guide was concentrated on the developmental and intellectual traits that could be appraised with a reasonable degree of objectivity. For the developmental traits, the New York Child Development Scales, which were used in the 1967-68 pre-kindergarten evaluation, again seemed appropriate. These scales yield ratings in four developmental areas: personal independence, interpersonal relations, language skills, and muscular coordination.

Evaluation coverage for the children's understanding of basic concepts, their fundamental knowledge and comprehension, self-image, and school attitudes was accomplished through the use of specially developed instruments that were administered to the children individually. One of these measures, the Pre-Kindergarten Inventory, had been constructed for last year's evaluation and was refined for use this year. A similar inventory was developed this year for administration to the kindergarten children in the follow-up study.

CHAPTER 3

IMPLEMENTATION OF THE PRE-KINDERGARTEN PROGRAM

The information in this chapter is based on interviews with the ten teachers of the sample selected, observations of their twenty classes, and questionnaires completed by the following numbers of the Pre-Kindergarten Program's personnel: 173 teachers, 168 teacher-aides, 161 family assistants, and 90 family workers. (Copies of these questionnaires and tabulations of the responses appear in the Appendix of this report.)

General Observations

All ten teachers in the pre-kindergarten classes visited by the evaluators appeared to be warm-hearted, sincerely concerned about the young children, and enjoyably involved in their work. This was true of both the relatively new teachers and the "veterans." Only one woman had been teaching for less than a year, and five had been teaching from eight to thirty-five years.

Most of the classes provided some form of individual instruction during part of the daily program. A majority of the teachers also attempted to encourage concept development, with varying degrees of success. Interaction of teachers and other adults with the children was substantial in most of the classes, and informal conversation was frequent in all of them.

Materials and equipment were abundant, readily available, and in good condition generally. The rooms, although small in some instances, were attractive, and the majority of them were clean. Although every classroom had a woodwork bench, only one was seen in use, and there was no evidence that the others had been utilized recently. Most of the benches were being used to store other materials. Play with water, sand, or clay was observed in only four of the ten rooms visited.

Detailed Description

Classrooms and Facilities. The majority of the rooms observed were bright and pleasant, with arrangements in specific areas for blocks, housekeeping, art, library, science, and table activities. Multi-ethnic pictures and examples of the children's work were displayed on bulletin boards. Some of these boards should have been brought down to the children's eye level.

During the initial observations, no growing plants or live pets were seen in three of the ten classes. The other classes had turtles, fish, or hamsters, growing carrot tops, sweet potatoes, or turnips, as well as the usual types of indoor plants. Additional growing plants and fish were seen in classrooms during the second round of visits in the spring, and some woodwork benches had been put into use by that time.

In general, although there were block corners, the number of blocks available was minimal, and the space allotted for block building was insufficient in many instances.

Children were free to move about the rooms and select materials from low shelves.

The 173 pre-kindergarten teachers who returned questionnaires supported the evaluators' observation that classroom equipment and supplies were generally abundant and of good quality. A few teachers indicated, however, that some items were in short supply. This was especially true of children's cubbies, playground equipment, and tape recorders and earphones. Some teachers cited the need for toilet facilities in the classrooms. Most teachers said they had no problems or only slight problems with the servicing of equipment.

Nevertheless, one-third of the respondents who offered suggestions addressed their remarks to improvement of classroom materials and methods for obtaining them. Most of the comments indicated that these teachers believed they could be more generously supplied with instructional materials of a high caliber. Most often cited were insufficiencies in books, records, and audio-visual equipment. A number of teachers expressed regret that cameras were no longer furnished. Recommendations also covered "more varied media, such as a talking typewriter," as well as overhead projectors for individual or small group use, stereopticans, flat pictures, and carrels."

Respondents frequently objected to what they called "a cumbersome and restrictive system of processing equipment orders," and they complained about delayed and irregular deliveries of equipment. A typical comment was: "A better method of ordering equipment should be instituted. I never receive even half of what I order. Also, we do not see what we order before we get it, so we are sometimes disappointed with new items when we receive them." Some other teachers recommended a more flexible purchasing system; they indicated that they found the allowance for special food purchases helpful, but that they needed other types of purchasing allowances in addition.

In a few schools, playground facilities were not available In some others, equipment was sparse. One teacher spoke disparagingly of "stereotyped park-playground equipment," advocating "outdoor settings in which creative, dynamic, outdoor activities can prosper." She explained: "This would require availability of water and soil areas, as well as lockable sheds for suitable equipment and accessory materials." Others, also, stated that a well-equipped playground should have a convenient storage unit that can be locked for security. Ideally, water should be accessible during the warmer months, soil areas should be available for planting, digging and tunneling, some of the respondents noted.

Teachers also expressed concern about the playground areas that were shared with older groups. A typical comment was: "Each school should have a special playground designated for pre-kindergarten children only. We find that the playground that we are supposed to use is often preempted by others. Because of the older children on the grounds, we are unable to take our youngsters out-of-doors to play as often as we like." Another complaint concerned the lack of indoor facilities during the winter. One teacher suggested that a large, empty classroom be used as a play area and for physical activities during cold or inclement weather.

The teachers and their staffs registered many complaints about the quality of the lunches served to the children. One teacher objected that "menus for lunch are limited and too repetitious (we get food from the central kitchen)." Another observed: "The lunches could be better balanced and more varied with less starches and more vegetables." Others suggested that they and parents be consulted to give due weight to the importance of cultural patterns in molding children's tastes.

The Teachers. Most of the ten teachers who were observed obviously enjoyed being with the children and did their best to make the classroom experiences pleasant for the children. The ten teachers had good rapport with the children and got along well with the aides.

The teachers, except for one who had been with her class just since the beginning of February, knew their children well. Both teachers and children evidently benefitted from the home visits made on the third Monday of each month. In fact, 55% of the parents of children in the classes observed indicated that their child's teacher had seen them at home.

During the interviews, some teachers reported that, because of the time lost during the fall strikes, they felt pressured to crowd more into each day than was possible. This resulted in more large-group teaching than is really desirable in pre-kindergarten.

Some teachers seemed to downgrade the role of guided play in the instructional process, but nearly all of them placed high value on verbal experiences of the class groups during circle time. Most of the teachers tried to develop the children's skills incidentally through techniques such as calling attention to the fact that records are round, using color names ("Children wearing red, please wash your hands"), or by having children count and serve cookies. When children were dressing to go home, a teacher would call attention to "a pair of gloves: one for one hand, and one for the other." In many classes, children knew their names and addresses, and were familiar with numbers, colors, and shapes.

During the winter visit, the evaluators observed that some teachers did not take active roles during free-play periods. As a result, these teachers missed opportunities for language and concept development, and failed to build on the immediate interests of the children.

The teachers who did interact with children during free play seemed to be trying to help the children to experience successes. Games were non-competitive, and all children participated with obvious enjoyment. During the second series of evaluation visits, notable growth in the effectiveness of teaching and in the implementation of the program was observed in most of the pre-kindergarten classes.

The teachers appeared to be making efforts to implement suggestions that had been offered in previous evaluation reports. During free play, several teachers moved from individuals to subgroups, raising questions and enriching the quality of the children's activities. At storytime, teachers encouraged individual comments and questions, and planned this session to allow time for pupil participation of this kind. In only one class, where children were still speaking Spanish with both the teacher and the aide, was it felt that the goal in language development had not been reached. In another class, the teacher still tried to teach arithmetic by rote instead of helping children to perform basic mathematical concepts through experiences.

In the single classroom where woodworking was observed to be in progress, the children were solving problems while they enjoyed the tools and wood--obviously encouraged by their teacher. This teacher also was adept at using children's cues to extend their learning. For example, when the children were building a roadway with blocks, she suggested using directional signs "to avoid a collision" and encouraged the children to find a way for pedestrians to cross the bridge.

The 173 teachers who returned questionnaires supplied this additional information: almost all (99%) were women; the majority had been teaching pre-kindergarten for three years or more. Half had been teaching school for five years or more. One-third had received their master's degrees, and about two-thirds had bachelor's degrees.

Paraprofessionals. Respect and friendliness among the teachers and aides observed were evident in most rooms. Even where little interaction took place, the relationships seemed to be courteous. In only one classroom was an indication of some hostility noticed. In this room, when the aide was temporarily in charge of the children, the teacher did not offer any assistance in meeting behavioral problems that arose. Another teacher reported that she usually left her plan book open and available, but the aides did not consult it.

In classes where the aides had been with the Pre-Kindergarten Program since its inception, their rapport with teachers was excellent. These aides helped with teaching functions and also performed routine chores. In many of the classrooms, the aides were mostly involved in such activities as cleaning up, setting tables, and getting lunch.

In several pre-kindergartens, the family assistant and family worker spoke Spanish well, and they were particularly helpful in arranging parent meetings and making home visits. These paraprofessionals also were able to communicate easily with the Spanish-speaking children in the class.

One teacher commented that the training sessions for paraprofessionals were too superficial and came too late in the year. She based this criticism on the single session that had been held in her district in February.

One teacher raised the question of whether paraprofessionals should work in schools attended by their own children. This situation created problems, the teacher said.

Many teachers reported that opportunities for planning with paraprofessionals were too limited. One teacher, who had worked closely with her aides and felt she had trained them well, said that they had been "promoted" to kindergarten, and she had to begin training new aides who were less capable.

In almost every class visited, the aides and teachers were working together more closely and effectively in the spring than in February. More of the aides were seen helping in actual instruction during the spring, and in working with individual children or small groups, rather than just cleaning up or preparing materials. Some of these aides also guided the children in completing self-selected tasks, talked with the children during the lunch period, and supervised cleanup activities.

The improved working relationships and greater involvement of the aides in the spring may have been merely the result of the teachers and aides having been together for a longer period of time. But the increased participation by the aides was probably due in part to the training sessions that had been conducted in all districts.

The nature of these sessions varied. In some, lectures on mathematical concepts or language arts were given to large groups. In another, a teacher and several aides might get together to talk about planning trips for children. Several sessions used films as introductions for thorough-going discussions. All the training sessions were attended by both teachers and aides. In some districts, the early-childhood supervisors led the training sessions; in others, the supervisors let the teachers serve as leaders.

Topics of the various sessions included evaluation of children's progress, goals of the Pre-Kindergarten Program, roles of personnel, curricula, room arrangements, and class management. In most districts, these training sessions were based on topics suggested by the staff members, or on the children's current needs as perceived by the supervisors.

Questionnaire data pertaining to the paraprofessionals generally supported and supplemented the information that had been obtained through interviews and observations. About 75% of the pre-kindergarten teachers and a somewhat larger percentage of the paraprofessionals who returned questionnaires reported no problems in dealing with each other. Eighty-seven per cent of the teachers rated their paraprofessional help as being of high quality. In general, the teachers' questionnaire responses indicated that the teacher aides were the most useful paraprofessionals. Some 93% of the teachers rated these aides as "very useful." Family workers were rated as "very effective" by 65% of the teachers, and family assistants were rated that high by 56%. The less favorable rating of "somewhat useful" was given to these two types of paraprofessionals by about a third of the teachers.

The 168 teacher aides, who constituted 40% of the paraprofessional group responding to the questionnaires, generally indicated that they frequently performed the duties listed for them, and that they considered these duties useful. The most common functions, each performed by at least nine-tenths of the teacher aide respondents, included preparing the room for activities, assisting with lunches and cleanup, accompanying the children on trips, and talking and listening to the children. More than four-fifths of these teacher aides indicated that they frequently helped with supplies, materials and equipment, outdoor play, and the clothing and personal needs of the children. A majority reported that they often read or told a story to the children, assisted with displays, used special language skills with the children, and met with the teacher to discuss daily plans. Less than half indicated that they had served as escorts for the children, cared for brothers or sisters during parent conferences, or made use of their special talents.

The 161 family assistants (38% of the paraprofessionals who responded to the questionnaire) reported that the duties they performed most frequently were visiting homes, consulting with other paraprofessionals and teachers, and attending parent meetings. More than four-fifths of these assistants said they rendered each of these types of services. About two-thirds reported that they often compiled lists of public agencies that might be helpful to parents or the school, and contacted these agencies. About half reported having consulted with the school's social worker and having assisted in the classroom. Most of the other family assistants said that although they had not performed these services often, they felt that such services had been useful when rendered. Less than a third of the family assistants reported that they had often consulted with the school's social worker or psychologist. Generally, the family assistants found that those consultations they had held were useful.

Of the 90 family workers who returned questionnaires, all but one were women. Two-thirds had been housewives, and the rest had done other types of work. Half had been in the Pre-Kindergarten Program a year or two, and the other half had served in the program for three or more years. More than three-fourths had attended high school.

A majority of the family workers said that each of the duties listed for them in the questionnaire had been useful. The service that the largest percentage of these repondents (94%) said they performed often was helping with lunches. More than four-fifths also indicated that they frequently assisted with trips, visited homes, met with parents, followed up absences, and conferred with teachers. Over half indicated that they often served as escorts for the children, assisted in recruiting or registering children for the program, conferred with other paraprofessionals, and assisted in the classroom when the teacher was absent. Although 70% of the family workers reported that they frequently kept a log of activities, this was the duty they rated as least useful.

About half of all the paraprofessionals who returned questionnaires indicated that they could not handle more duties than they had been assigned. Fewer than a fourth felt that they could carry a heavier load, and about the same proportion indicated uncertainty about this.

About three-quarters of the paraprofessionals said that the inservice training program had been helpful "to some extent" in improving their understanding of their roles. About the same proportion reported that the training program had increased the teachers' understanding of the roles of paraprofessionals, had improved cooperation between the teachers and paraprofessionals, and had increased the use of the special skills and talents of the paraprofessionals. About two-thirds of the respondents indicated that the training program had been useful "to some extent" in improving the pre-planning of daily classroom activities and lessons.

About half of the teachers who returned questionnaires checked "effective" or "very effective" as their ratings of the training program. About a third of these teachers rated the training program as "ineffective"; some 83% said that they felt the training series should be expanded and improved.

The tenor of the paraprofessionals' responses on an open-ended question was indicative of their pronounced enthusiasm for the program. This was evident in such comments as: "The Pre-Kindergarten Program is a wonderful preparation for these small children. What they learned, and the progress that I have observed, is amazing in all ways. I love every moment I spent with them. The parents are very happy and satisfied with their children's experience in pre-kindergarten."

Another paraprofessional wrote: "I, as a family assistant and a mother, know for a fact that this program is of vital importance to the children and the community. My children have had the benefits of experience in pre-kindergarten." Another: "I think that the Pre-Kindergarten Program is great, especially for children whose mothers have many children and cannot give them all the attention and food that they need." And, "I think the Pre-kindergarten Program is wonderful because I have seen it help so many children who start out being accustomed to their mothers only. At first, these children just cry, stand, or sit in one place all day, but then after a month or two, they begin moving out little by little, and by June they are so different because they learn to do so many things to help themselves."

Family workers, whose functions encompass both classroom and social-service aspects of the program, were particularly concerned about staff roles and functions being more clearly delineated. Both paraprofessionals and teachers said that team meetings held more regularly would help to achieve this objective. Some family workers said that regular planning sessions with both classroom and social-service staffs were needed. One family worker remarked: "We should have a meeting with teachers once a week, without fail, so we would know what is going on in class, and so we could give them a run-down on what we've done all week." Another family worker suggested that part of the third Monday of each month be used for a staff conference "to air out grievances and to share ideas on how to improve our program."

Work in the Classroom. Most of the observers found that the classroom strategy stressed concept development rather than rote learning. For example, one class heard the story "The Carrot Seed." The next day, this class went to the store and bought carrots. The children scraped and ate the carrots, then planted the tops. The teacher used the occasion to emphasize vocabulary, size concepts, sensory perceptions (touch and taste), and capitalized upon virtually all opportunities that might be used for developing learning experiences.

In most of the pre-kindergartens visited, the teachers placed heavy emphasis on language-development games and on learning about colors and shapes. Attendance-taking was used to call the children's attention to the initial sounds of words and to give them experiences with numbers. The observers saw a variety of art activities, including finger, drip, string, straw, and sponge paintings. Watercolor paintings, as well as collage and clay work, were also in evidence.

Problem solving was encouraged, especially during block play. For example, in one classroom, when the children were building a zoo, they put a wall around it, which prevented the animals from being seen. The teacher asked how visitors could view the animals, and then led the children to the solution.

Improvement was noted in the style of teachers' questioning. One teacher engaged in the following dialogue as she put flannel cut-outs of a story's characters on a flannel board:

Child: Why can't the butterfly fly?

Teacher: Why can't it fly?
It's paper. It's not alive.
It'll only fly if I push it.

(She placed on the flannel board cut-outs of a ladybug, butterfly, bird, flower, insect, caterpillar.)

Teacher: These are not the same.
What is the word we use when they're not the same?

Child: They are different.

Teacher: How many of these things crawl?

(No response)

Teacher: Does the flower crawl?

Children: No.

(Children went through this question-answer for all cut-outs.)

Teacher: Let's play our game. Look out of the window and see what's moving.

(The children's eyes were distracted from the flannel board, and they watched the trees outside while the teacher removed one of the objects from the board.)

Teacher: What's moving?

Children: Trees, leaves.

Teacher: Something else moved--off the flannel board. What is it?

Child: A tree.

Teacher: It grows like a tree, but it's not a tree.

Child: A flower.

The children guessed, and the game was repeated. The teacher began to stimulate the children further by asking them to recall the colors and shapes of the cut-outs. She encouraged the children to give each other cues if they knew the answer.

The Pre-Kindergarten Guide. The Guide seemed to be most useful to the teachers who were new to the program. They could turn to the Guide for direction. Some of the more experienced teachers were critical of that part of the publication's format which listed in parallel columns the simultaneous activities of the teachers and children.

The Children. Fifty-one per cent of the children in the observed classes were boys, and 49% were girls. Forty-nine per cent were Negro, and 40% had Spanish-language backgrounds. According to the class rosters, only 33 children in the 20 classes had withdrawn from the program during the current school year. Fifteen of this group were Negro, and 14 were Spanish-speaking.

The current procedures for selecting children for participation in the Pre-Kindergarten Program were rated as "satisfactory" or "very satisfactory" by 66% of the teachers who returned questionnaires. As to whether the school had as many pre-kindergarten classes as needed, 39% of the teachers said it did, while 47% indicated that the number of openings in existing classes was insufficient.

Many of the paraprofessionals and pre-kindergarten teachers proposed that the program be enlarged to accommodate more children. Some indicated a very definite need in their communities for more classes: "We need more room, since we have a waiting list that could have easily filled another class." And, "More pre-kindergarten classes are desperately needed in areas such as ours; turning down 60 to 100 families each year frustrates teachers, parents and children." "There is a tremendous need for more pre-kindergartens in our neighborhood." Others suggested that the program should be incorporated into the public school system on a much broader scale: "The Pre-Kindergarten Program is in need of expansion. Every neighborhood should be able to offer its pre-school children the opportunity to participate in a program which provides an environment for learning." Increased time at the beginning of the program for more effective recruitment of children was urged, and several of the teachers asked for wider publicity to make the program known within the community so that they would not have to be involved in door-to-door recruitment. A number of the paraprofessionals also registered concern for more substantial parent participation in the program. Suggestions included the possibility of allowing parents to serve as helpers in class excursions.

CHAPTER 4

IMPLEMENTATION OF THE KINDERGARTEN PROGRAM IN RELATION TO THE PRE-KINDERGARTEN PROGRAM

In the kindergarten follow-up study of the children who were in the program last year, the evaluators made a winter and a spring visit to each of 20 kindergarten classes. The chapter is based on information obtained by observation during these visits and interviews with the teachers, supplemented by questionnaires, which were returned by 319 kindergarten teachers.

Classroom and Facilities. Both similarities and differences between pre-kindergartens and kindergartens were observed in this area. The kindergarten classrooms generally had certain areas designated for specific activities. In some classrooms, these areas were clearly demarcated, while in others they were not so distinct. Most of the areas contained materials similar to those that had been seen in the pre-kindergartens, but the kindergartens usually had smaller quantities. As in the pre-kindergarten classrooms, the materials in the kindergartens were accessible to the children when adequate shelf space was available.

Especially evident was the limited number and narrow variety of materials in the block corner. Most classrooms contained some type of library, although this typically consisted of just one or two shelves of books. In only a few classrooms was there a good library corner similar to that found in the pre-kindergartens. In the music section, pianos and record players were generally available, and were used frequently. On the other hand, rhythm instruments were rarely used and not often displayed. The housekeeping area was usually well supplied, and in some cases, was better equipped than those seen in the pre-kindergartens. The kindergarten science materials were more abundant and more varied than the comparable pre-kindergarten materials, but usually were not arranged together in a specific science area.

Most of the kindergarten classrooms were bright in appearance and cheerfully decorated with both educational displays and examples of the children's work. A major emphasis on reading and arithmetic readiness was evidenced by the conspicuous displays of alphabet and number charts, calendars, labels on classroom objects, and samples of the children's letter and number work.

Children's names were written on their belongings and drawings. In some classrooms, a photograph of each child, with his name, was posted on a wall or bulletin board.

Materials illustrating topics discussed in class, such as seasons, holidays, and the work of community helpers, were also observed in many kindergarten classrooms. The children's art work was commonly related to these topics, too.

Attempts to enhance ethnic identification and pride were apparent in the display pictures of notable individuals of varied skin colors. In some classrooms, the library contained a few books that featured Negro or Spanish-speaking persons as central characters. A bulletin board was usually set aside for pictures of famous Negroes.

The Teachers. All of the 319 kindergarten teachers who responded to the questionnaire were women. More than three-fourths had been teaching for three or more years, and three-fifths had been at the kindergarten level for that length of time. More than one-third had taught only at this level,while 40% had experience in one or more of grades 1 through 3.

The evaluators observed divergent teaching styles in the twenty classes. Some of the teachers, in structuring their daily programs, were very responsive to the cues of the children. These teachers circulated freely among the childen as they worked at different activities, offering guidance and suggestions. Other kindergarten teachers seemed to prefer a high degree of structure and were less flexible in adapting the program to the children's needs.

Those teachers whose daily plans were less structured usually tended to tolerate more random behavior in their classrooms, while those with a more highly structured approach were firmer in their control of the children.

Teaching took place not only during formal lessons, but during informal discussions as well. Some teachers were also able to capitalize on numerous other opportunities to enable the children to learn spontaneously.

Paraprofessionals. The role of the educational assistants in the kindergarten classrooms was usually limited to housekeeping chores, preparing materials, and disciplining children. In 3 of the 16 classrooms observed, the teacher used the educational assistant effectively, allowing her to assume some teaching responsibilities.

The Work in the Classroom. Although the schedule of daily activities varied from class to class, some basic similarities were observed. Every class had a free-play period, which usually came at the beginning of the session. In most classes, each of the children had a choice of a wide variety of activities, but in other classes the choice was restricted. Only some of the teachers circulated about the room during free play--assisting, conversing, or participating in some of the games. The educational assistants usually served mainly as housekeepers during this time. The children moved freely from one activity to another in some classes, sampling many of the materials. In many classes, the pre-kindergarten children limited themselves to a single activity. Cleanup always followed free play.

Most of the classes had a rest period, when the children usually sat at their tables with their heads down. Some teachers played piano music or phonograph records during this time. Rest was usually followed by a snack consisting of milk and cookies or crackers. The snack period was sometimes used as an occasion to provide educational experiences. A few teachers encouraged the children to participate in serving the snack to others, or at least in serving themselves. The server was often asked the number of items he needed for the children at his table.

The evaluators saw various types of pre-reading and reading exercises during their kindergarten classroom observations. For example, in some classes the teachers stressed the phonics of different letters, while in others the children read from primers. Pre-reading lessons most frequently involved the entire class, although some teachers gave individual instruction. In one school, the children left their classroom to get special instruction from a reading teacher in another room. The kindergarten children in this school were not all at the same level of development in this respect; each individual was given instruction according to his progress and ability.

A sedentary period was often followed by an activity that allowed the children to move about freely. During the times devoted to rhythms and songs, the evaluators observed group singing and dancing to piano, guitar or recorded music, as well as many other types of musical games and exercises.

The teacher, educational assistant, or a cluster teacher usually read a story to the entire class, often pausing to ask the children questions about the story. In addition, attempts were made to relate the children's art work and role-playing to the content of the stories. One teacher encouraged the children in her class to play with pipe cleaners and to discover that these could be formed into different shapes after reading a story about geometric shapes.

In all areas of the kindergarten curriculum, mathematical concepts were stressed. Number recognition and naming were taught during discussions of the calendar and through lessons involving a number chart. Counting, one-to-one correspondence, and quantitative concepts were taught continually during activities such as attendance-taking, snacktime, and free play. In one class, addition and subtraction were taught through the use of pennies, nickels and dimes.

Weather was the science area that the evaluators saw being taught most frequently. Lessons centered around the seasons, temperature, and the effects of different weather conditions. The teachers used many of the display items to explain the fundamental concepts of science.

Social studies topics taught in the kindergartens included transportation, community helpers, geography, and current events. The evaluators observed children participating actively in these discussions, both verbally and through role-playing. Neighborhood trips and guest speakers who represented different occupational groups helped make these subjects more interesting to the children.

The Children. About 65% of the children in the observed kindergarten classes were Negro, and approximately 29% were Spanish-speaking. One-fourth of these classes were composed almost entirely of children who had attended pre-kindergarten and one-fourth had almost no children who had had this exposure. The other half of the classes were mixed as to the prior experience of the children. In these classes, the teachers typically did not know offhand which of their pupils had been in the Pre-Kindergarten Program. The observed teachers rarely made an attempt to group the children within their classes according to abilities related to specific lessons.

Curriculum Content. The evaluators observed lessons being conducted in many different curriculum areas. Probably the one most heavily emphasized in the kindergartens was pre-reading. The children were taught to recognize, match, name, and sound-out the letters of the alphabet. In some classes, many children were taught to read individual words and sentences. Often the lessons were based on material in primers and workbooks that were provided for each child.

Group songs and games served for the teaching and reviewing of basic information such as names and addresses, body parts, and right-left orientation. Some teachers also used these activities as means for teaching the children to follow directions.

Formal and informal teaching of colors was observed in all kindergarten classrooms. Most teachers found many ways of putting the lessons on colors into diverse contexts. For example, a child would be asked to name a colored crayon and then to find an object of the same color in the room. In another class, the teacher dismissed the children in small groups according to the color of their clothing. Shades of various colors were discussed in some classrooms.

Shapes were also taught both in formal lessons and informally. Most of these lessons were conducted with small groups of children or with an individual child. The topic of geometric shapes was often tied in with the broader subject of mathematics by pointing out the number of sides and corners that characterized different shapes.

CHAPTER 5

EFFECTS OF THE PROGRAM ON THE PRE-KINDERGARTEN CHILDREN
(Based on Information Obtained from Questionnaires, Observations, and Interviews)

The children in all the pre-kindergarten classes observed were friendly and relaxed. Most of the 191 parents who returned questionnaires indicated that their children were happier at the end of the school year than at the beginning. Between 54% and 79% of these parents reported that the pre-kindergarten experience had helped their children to get along better with their siblings, friends, parents, and other adults. Eighty-seven per cent of the pre-kindergarten teachers and 77% of the paraprofessionals who returned questionnaires reported that the children in their classes had shown substantial improvement in ability to get along with each other. More than 90% of the pre-kindergarten teachers indicated that few, if any, problems stemmed from the children's social and emotional behavior.

Improvements in the children's health care were noted by 80% of the pre-kindergarten teachers, and by 81% of the paraprofessionals. Eighty-two per cent of the parents of pupils in the sample classes stated that they saw "great improvement" in their children's ability to dress themselves. "Some improvement" in this ability was reported on the questionnaires of 86% of the pre-kindergarten teachers and paraprofessionals.

The evaluators noted that the children they observed had become more independent and outgoing during the period between the evaluators' initial and final visits to the classrooms. Routines were handled well; the children responded easily to simple directions. For example, they washed their hands without being told to do so before juice and lunch, and poured their own juice in most of the classes visited. At the end of the year, the children were observed to show much more independence in expressing their own opinions and settling differences among themselves. They worked independently and respected each other. About three-quarters of the paraprofessional questionnaire respondents also noted that the children were becoming increasingly independent, and about two-thirds stated that the children had shown improvement in following directions.

The children in several observed classes did not converse with each other very much during the early observations. At the end of the year, the evaluators found them to be much more verbal, and they showed more independence in expressing their own opinions and in settling differences among themselves. Eighty-eight per cent of the parents reported that their children were talking more at the end than at the beginning of the school year. Two-thirds of the pre-kindergarten teachers and paraprofessionals also said that the children had shown great improvement in their speaking skills.

Eighty-seven per cent of the teachers found no major problems related to language difficulties among the children in their classes. Teachers reported that non-English-speaking children had learned to speak English by June, using full sentences, where formerly their English replies to questions had been monosyllabic.

The majority of all questionnaire respondents (pre-kindergarten teachers, paraprofessionals, and parents of the children in the sample classes) indicated that they felt that the Pre-Kindergarten Program had been effective in stimulating the children's intellectual and cognitive development. About 70% of the teachers and paraprofessionals, as well as 84% of the parents, added that the children had shown increased interest and attention by the end of the school year. Sixty-five per cent of the teachers, 80% of the paraprofessionals, and 75% of the parents said they had noted more exploratory behavior by the children. Ninety-six per cent of the pre-kindergarten teachers reported children's improvement in comprehending and using mathematical concepts, and 85% cited improvement in the area of science. About 90% of the teachers also said that they had encountered no problems with pupil abilities or comprehension.

Taken as a whole, the information from questionnaires, interviews, and classroom observations should lead to the conclusion that the children in the Pre-Kindergarten Program are benefitting substantially from their pre-school enrichment experiences.

CHAPTER 6

PRE-KINDERGARTEN INVENTORY

Background and Purpose. The Pre-Kindergarten Inventory, as previously mentioned, was developed by The Psychological Corporation in the early spring of 1968 for use in the 1967-68 evaluation of the New York City Pre-Kindergarten Program. The evaluators constructed the items for the inventory after they had obtained information about the program from the project director and staff members, classroom observations, and the Pre-Kindergarten Curriculum Guide. While the inventory was revised slightly for use in this year's evaluation, the content scope remained essentially the same.

Scope of Coverage. The areas sampled by the inventory are those covered by the Curriculum Guide and which also were observed being emphasized in the classrooms. Additionally, the inventory includes a section for assessing the self-image of children in terms of their attitudes toward school.

The inventory is divided into the following eight sections: Introductory Questions, Body Parts, Colors, Basic Concepts, Shapes, Mathematics, Science, and Self-Image. One purpose of the Introductory Questions--which tested the child's knowledge of his name, age, birthday, and the day of the week--was to establish rapport.

In the Body Parts section, the child was asked to name six body parts when the examiner pointed to them. When a child was not able to name one of the parts, the examiner later told him the name and asked the child to point to it.

The Colors section, which tested the child's knowledge of six colors through the medium of crayons, was administered in a similar manner. The child was first asked to say what color each crayon was. If he was unable to name one or more, the examiner later mixed the six crayons, then mentioned the names of the ones previously missed and asked the child to select the appropriate crayons.

Fourteen concepts were tested in the Basic Concepts section. For each, three answer choices were given, either as a set of three pictures or as three parts of one picture, and the child was asked to identify the correct choice by pointing.

To test the child's knowledge of geometric shapes, wood forms were used. The child was first asked to name each shape. If he was unable to do this, the examiner gave the name and asked the child to point to the form after it had been mixed with the others.

In the Mathematics section, the child was first asked to count various quantities of blocks placed before him in a row. He was then asked to identify the first, middle, and last of five blocks. His understanding of the concepts of size was tested by asking him to identify the biggest and smallest of five different-sized paper squares.

Three areas of science were tested. The child was shown a set of five weather pictures and asked to identify four weather conditions by pointing to the correct picture. He was then shown six small toys--three with wheels and three without--and was asked to identify the three that had wheels. A similar method was used to test understanding of magnets. The child was first shown a magnet and asked if he knew what it was. If he did not appear to understand its purpose, the examiner explained it. The child was then presented with six objects, only three of which were made of iron or steel, and was asked to give the examiner those that the magnet could pick up.

The method used to assess self-image was essentially the same as that of the 1967-68 evaluation. A set of three photographs showed the face of a Negro child of kindergarten age, and of the same sex as the child being tested, in three distinctly different expressions--happy, neutral, and sad. The examiner then described eleven different classroom situations to the child and asked him to point to one of the three photographs to show how he would feel in each of those situations in turn. The situations described were deemed likely to stimulate feelings in children four or five years old. Negro children were portrayed in the photographs because the majority of the children in the sample were Negroes. Photographs were used because true-to-life representations were considered likely to facilitate identification responses from children in the age range tested.

Scoring Procedure. Most of the items were scored as either right or wrong with one point credited for a right response. For Wheels and Magnets each of which contained 6 items, the number of incorrect responses was subtracted from the number of correct responses. A child was given credit for passing each of these parts if he achieved a score of 2 or better. The total score on the Pre-Kindergarten Inventory was computed by adding the number of points a child received on Wheels and Magnets and the number of points he received on all other items.

Responses to the items in the Self-Image section were scored as 1 for the choice of the picture showing a happy child, 2 for the neutral choice, and 3 for the sad. These scores were not included in the computation of the total score on the Pre-Kindergarten Inventory because they do not measure achievement.

Data Analysis. The data were analyzed in the following manner:

1. The number and percentage of children passing each item were recorded. Subgroup averages were computed for the Spanish-speaking children and for the others, by sex. The chi-square method was used for testing for significance of differences among the subgroups on each of the items.
2. Section and total-score averages were computed for the subgroups and total group. Differences associated with the sex or language-background classifications, or their interactions, were subjected to the analysis-of-variance treatment, and further tests of significance of differences between means were made through t-tests when warranted.

The Pupil Sample. The Pre-Kindergarten Inventory was administered in May to 204 children in the sample classes. Of this sample, 107 (52%) were boys and 97 (48%) were girls. One-third of the children tested were from a Spanish-language background.

Results of the Pre-Kindergarten Inventory

Introductory Questions. Almost all the children (99%) were able to tell the examiner their first names, and 78% could say how old they were. Only 25% could give the month of their birth, however, while even fewer could name the current day of the week. (The percentages of correct responses are shown in Table 1.)

Only on the item asking the month of birth was there a significant difference between the percentage of correct responses of the two language groups.

The Spanish-speaking children did not do as well as the others in giving this information.

TABLE 1

Percentages of Correct Responses to the Introductory Questions of the Pre-Kindergarten Inventory

	Spanish-Speaking (N=68)	Others (N=136)	Total Group (N=204)
	%	%	%
Name	99	100	99
Age	65	85	78
Month of Birth	10	30	25
Day of Week	7	20	16

Comparison of the performance of the children in this year's evaluation sample with the similar 1967-68 sample on the Introductory Questions could be made on only one item because the method of administering the other items was revised this year. On this item, which required the child to give his age, the percentage of correct responses was about the same for the two years.

Boys and girls performed about equally well on the Introductory Section of the inventory, and also on the subsequent sections.

Body Parts Section. Each of the six body parts was correctly named by 68% or more of the children. Nose was named by the most children (97%), and leg proved to be the most difficult (68%). The percentages of correct responses for the other three parts were: ear and head, 92%; foot, 84%; and finger, 82%.

No fewer than 93% of the children identified each of the body parts when they were allowed to do so either by naming it or by pointing to it as the examiner named it. For the other parts, the corresponding percentages were: ear and finger, 99%; nose, 98%; and foot and leg, 93% (see Table 2).

The mean score on the Body Parts section for the 204 children tested was 11.0 out of a possible 12.0. (See Table 3 for the means and standard deviations for each of the sections of the inventory.)

Language background was a factor in performance on the Body Parts section (Table 4). For example, not more than a third of the Spanish-speaking children could give the word for leg, but more than three-fourths of the others could do so.

TABLE 2

Percentages of Correct Responses to the Body Parts Items of the Pre-Kindergarten Inventory

(N=204)

	Naming %	Naming or Pointing %
Nose	97	98
Foot	84	93
Ear	92	99
Finger	82	99
Leg	68	93
Head	92	100

TABLE 3

Means and Standard Deviations of the Pre-Kindergarten Inventory Scores

	Spanish-Speaking				Others				Total Group (N=204)	
	Boys (N=43)		Girls (N=25)		Boys (N=64)		Girls (N=72)			
Section	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
Body Parts	9.6	2.00	10.0	2.03	11.4	.86	11.7	.56	11.0	1.32
Colors	8.2	3.03	8.6	3.60	9.4	3.03	10.6	2.77	9.5	3.36
Basic Concepts	11.0	1.75	10.6	1.62	12.1	1.50	12.0	1.79	11.6	1.78
Shapes	3.3	1.93	3.6	1.92	4.1	1.77	4.3	1.72	4.0	1.85
Math	6.8	1.75	6.9	1.16	7.0	1.77	7.2	1.82	7.0	1.73
Science	6.5	1.93	5.6	1.83	7.5	1.69	7.3	1.73	7.0	1.88
Total Score	47.2	8.03	47.4	8.76	53.8	7.34	55.6	7.42	52.3	8.01

Two of the body parts, ear and finger, were tested in exactly the same way as in the 1967-68 evaluation study. No significant differences between the performance of the children in the samples of these two years occurred on these two items.

TABLE 4

F-Ratio Reflecting Effect of Language-Background Factor on Performance on the Pre-Kindergarten Inventory

Section	F Ratio
Body Parts	81.3**
Colors	9.7**
Basic Concepts	24.1**
Shapes	7.5**
Mathematics	3.2 (not significant)
Science	23.9**
Total Score	39.3**

**Significant at .01 level

Colors Section. The mean score for the total group on the Colors Section was 9.5 out of 12. Red was the color named correctly most frequently, and green the least. The percentages of correct responses were 78 for red and 67 for green (Table 5). Similar results were obtained with the sample group that was tested last year.

Black was the color the most children could identify either by naming or by pointing to the crayon of that color after the examiner had named it. All of the colors tested were identified in this manner by at least 82% of the children.

The Spanish-speaking children did not do as well as the others in identifying colors. This difference was most clearly evident on three colors: red, green, and black.

TABLE 5

Percentages of Children Correctly Responding to Each of the Color Items

	Naming %	Naming or Pointing %
Red	78	84
Yellow	77	84
Green	67	82
Blue	72	85
White	74	82
Black	74	88

Basic Concepts. The mean score on Basic Concepts for the total group was 11.6 out of 14, with a standard deviation of 1.78. Each of the four concepts--off, on, open and closed --was correctly identified by at least 96% of the children. The concept that proved the most difficult was softest (60% correct.) Each of the remaining items was passed by between 70% and 89% of the children. On nine of the fourteen concepts, the children's performance was comparable to the performance of the children in the 1967-1968 evaluation sample. Table 6 contains the percentages of children correctly responding to each of the items.

TABLE 6

Percentages of Children Passing Each of the Items on the Basic Concepts Subtest

	1968-1969 (N=204) %	1967-1968 (N=268) %
Open	99	99
Softest	60	71
Off	96	96
Inside	80	85
Over	82	83
Hottest	82	81
Behind	70	68
Closed	98	98
Hardest	79	86
On	99	97
Outside	70	88
Under	89	87
Coldest	82	87
In front of	80	79

Performance on the Basic Concepts subtest did not appear to be related to sex. However, the Spanish-speaking children did not perform as well as the others. This difference was especially noticeable on three items: behind, under, and in front of. The mean score for each of the sub-groups appears in Table 3.

Shapes Section. On this section, the total group's mean score was 4.0 out of 6.0. Circle was correctly named by 82% of the children, but triangle by only 45%, and square by 44% (Table 7). The relative difficulty of these items remained the same when identification by either naming or pointing was regarded as a correct response.

Significantly fewer correct identifications of the shapes were made by the Spanish-speaking children than by the other children (Table 4).

TABLE 7

Percentages of Children Correctly Responding to Each of the Shapes Items

	Naming %	Naming or Pointing %
Circle	82	91
Square	44	63
Triangle	45	74

Mathematics Section. Three-fourths or more of the children showed that they knew the concepts of the numbers one to five. Correct responses decreased in the upward progression from one to five.

About 40% of the children were able to point to the first and middle of a series of objects. Fewer (21%) correctly identified the last object in the series.

Almost all of the children (98%) could indicate which of the several objects of the same shape was the biggest. However, only 60% could indicate which was the smallest.

No differences in performance related to language background were found in this section. Larger percentages of children in this year's sample than in last year's could identify each of the number concepts, and point to middle, but the percentages of children who identified last and first was higher in last year's evaluation sample.

Performance on biggest and smallest could not be compared for the two years because knowledge of these concepts was measured differently in the two evaluation studies (Table 8).

The mean score for the total group on the Mathematics section was 7.0 out of 10.0 (Table 3).

TABLE 8

Percentages of Correct Responses on the Mathematics Section of the Pre-Kindergarten Inventory

Number Concepts	1968-69 (N=204)	1967-68 (N=268)
1	98	94
2	94	89
3	91	77
4	82	69
5	76	61
Ordering		
First	41	61
Middle	44	29
Last	21	52
Size Relationship		
Biggest	98	-
Smallest	60	-

Science Section. On the weather part of the Science section, more than 80% of the children were able to identify three of the weather pictures: rainy (95%), sunny (84%), and snowy (83%). Windy appeared to be the most difficult; only 56% of the children correctly selected this picture (Table 9).

Almost all of the children (96%) demonstrated ability to recognize a wheel by selecting out of a group of toys just those that had wheels. However, only 31% showed that they understood the use of a magnet by selecting from a group of items only those that a magnet attracts.

The Spanish-speaking children did not do as well as the others on the Science section. For example, less than 75% of the Spanish-speaking children identified the sunny picture, while about 90% of the others did so.

The performance of the total group on the weather items was similar to that of the children in last year's sample, although this year a slightly higher percentage identified some of the pictures. Data for wheels and magnets in the 1967-1968 evaluation are not included because the method of testing this material was modified in the present study.

The mean score on the Science subtest was 7.0 out of a possible 10.0.

TABLE 9

Percentages of Children Passing Each of the Items on the Science Section

	1968-1969 (N=204)	1967-1968 (N=268)
Rainy	95	85
Snowy	83	78
Windy	56	55
Sunny	84	87
Wheels	96	-
Magnets	31	-

Total Scores on the Cognitive Part of the Inventory. The mean raw score for the total sample group on the Pre-Kindergarten Inventory, excluding the Self-Image section, was 52.3. The scores for the individual children ranged from a low of 28 to the highest possible (68).

The performance of the girls on the total test was significantly better than that of the boys. This difference can be attributed mainly to the girls' higher percentages of correct responses on two sections of the inventory, Body Parts and Colors.

The Spanish-speaking children did not perform as well as the others on the inventory as a whole. This was a general trend that was evidenced on all sections except Mathematics.

The children in this year's evaluation sample performed at about the same level as those in last year's sample--so far as direct comparison of results was possible. The percentage equivalents for the mean raw score on the total test for the two years are: 1968-1969, 77%; 1967-1968, 74.

Self-Image Section. On the three sample items, each calling for one of three choices (happy, neutral, or sad), the children, with only rare exceptions, made the appropriate choice. On all but one of the actual test items, the happy and neutral pictures were chosen more frequently than the sad picture.

About half of the children chose the happy picture to indicate their feelings when they were at school and when they were with their teacher. The majority of the children selected either the neutral or the happy picture when asked to show how they felt when they were doing things at school, when they were playing, and when their teacher was helping them.

For each of the three situations related to the children's self-concepts ("Looking at yourself in the mirror," "Thinking how big you are getting," and "Now") almost one-half of the children chose the happy picture, while less than a quarter picked "sad."

The responses to this section were not significantly related to sex or language background.

TABLE 10

Percentages of Responses on the Self-Image Section of the Pre-Kindergarten Inventory

Point to the picture that shows how you feel:	HAPPY	NEUTRAL	SAD
When you are eating ice cream	76	16	6
When you hurt yourself	2	19	78
When you are walking	26	56	16
When you get to school in the morning	48	33	18
When you are doing things at school	36	44	19
When you are with your teacher	42	28	29
When you play with other children in your class	50	34	15
When the teacher asks you to help her	37	43	19
When you look at yourself in the mirror	48	29	21
When you think about how big you are getting	46	34	19
Right now	45	38	15

Discussion of the Pre-Kindergarten Inventory Results

The children in the evaluation sample performed quite well on the Pre-Kindergarten Inventory. As indicated in the preceding tables, the percentage equivalent of their average total score was 77. They were most proficient on the sections that tested their ability to identify body parts and to understand basic concepts. Identification of geometric shapes proved to be the most difficult task for them.

The pattern of mean scores on the various sections is comparable to that of the sample group that was tested in the 1967-68 evaluation. The children's varying success on different sections in both years is believed to reflect the relative emphasis placed on these content areas in the pre-kindergarten classrooms. However, variations in the inherent difficulty from one section to another may account for some of the differences in the children's performance. Out-of-school learning may also have varying degrees of influence on the abilities tested.

The relatively poor performance of the Spanish-speaking children, manifested on all the sections except mathematics, no doubt reflects an English-language handicap. The evaluators noted that many of these Spanish-speaking children had a limited knowledge of the English language and were unable to understand much of what was being said in the classroom, since most teachers spoke only English. In addition, the Spanish vocabulary that these children had already learned probably hampered them in learning corresponding English words.

In this connection, it may be noted that when class averages were compared, the two classes that were quite consistently below the rest of the sample were those composed almost entirely of Spanish-speaking children. At the other end of the distribution, the two classes with the highest mean scores had only three Spanish-speaking children between them. (See Table 30 for mean scores by school.) This lends support to the conclusion that children with a Spanish-language background lag behind the other children in cognitive development in the Pre-Kindergarten Program.

In general, the girls tended to perform better than the boys did on all the cognitive sections except science. Mean differences were significantly in favor of the girls on the Body Parts section, Colors section, and total-score scale. This trend probably can be explained at least partially by the fact that girls generally mature more rapidly than boys do.

The results of the Self-Image section of the inventory suggest that most of these pre-kindergarten children had developed a positive or neutral attitude toward school, and viewed themselves in a favorable light.

CHAPTER 7

TEACHERS' RATINGS OF THE PRE-KINDERGARTEN CHILDREN ON THE DEVELOPMENTAL SCALES

The classroom teachers' ratings of the pre-kindergarten children on the New York Child Development Scales provided another type of appraisal of the program's effects. The nature of these scales and the results obtained from their use this year are described in this chapter.

New York Child Development Scales

Background and Purpose. This battery of four scales was constructed by members of the staff of the New York City Bureau of Educational Research under the supervision of the Director, Dr. J. Wayne Wrightstone. The scales were designed to help the classroom teacher make and record systematic observations of a child's behavior. While the items within each of the scales are grouped at six age levels, three through eight, the battery is intended for use with children in the age range four through seven.

Description of the Scales. Each scale is a check-list of 30 items drawn from research studies of child development. Five items are listed at each age level in the three-to-eight range. Each item is placed at the age level where the behavior described first appears in the repertoire of most children. The four component scales are as follows:

Scale A: Personal Independence--self-care, independence in work and play, and assumption of responsibility in routine activities

Scale B: Interpersonal Relations--ability to get along with others, to participate in activities with groups of various sizes, and to develop favorable attitudes toward other children and adults

Scale L: Language--verbal expression, as evidenced by abilities in articulation, vocabulary, sentence structure, and concept communication

Scale M: Motor Development--ability to control and coordinate muscular movements in walking, running, playing games, manipulating play and work materials, writing, and other manual and physical activities

Basis for Interpreting the Results. The scales were scored by the evaluators in accordance with the procedures specified in the manual. Part of this procedure involved the use of a table for converting the scores to the following numerical ratings:

1--Markedly above average (at least a year above average)
2--Above average
3--Average
4--Below average
5--Markedly below average (at least one year below average)

The conversion table gives the ratings suggested for scores obtained by children in successive chronological age brackets of 6 months, ranging from 3 years to 8 years, 5 months. These ratings were derived some years ago from trial use of the scales with about 400 children in 16 elementary and 3 nursery schools which were under the supervision of the New York City Board of Education.

The Pupil Sample. The New York Child Development Scales were distributed in early May to all pre-kindergarten teachers whose classes were included in the observation sample. These ten teachers returned ratings for 229 of the 300 children.

Results of the Child Development Scales

On Scale A (Personal Independence), the mean rating of the pre-kindergarten children was 2.3, which falls between the categories of "average" and "above average." The ratings of the girls were more favorable, on the average, than those of the boys. The mean ratings of the Spanish-speaking children were about the same as those of the other children (Table 11).

TABLE 11

Mean Ratings for Pre-Kindergarten Children on the New York Child Development Scales

	Spanish-Speaking (N=91)	Others (N=138)	Total (N=229)
Scale A (Personal Independence)	2.4	2.2	2.3
Scale B (Interpersonal Relations)	2.6	2.3**	2.4
Scale L (Language)	2.8	2.3**	2.6
Scale M (Motor Development)	2.1	2.2	2.2

**Significantly better than means of Spanish-speaking group ($p<.01$)

The mean rating for the total group on Scale *B* (Interpersonal Relations) was 2.4, which was also between "average" and "above average." Sex and language background showed some relationship with the ratings on this scale. Lower stages of development in interpersonal relations were indicated for boys than for girls, and for Spanish-speaking children than for the others.

On Scale *L* (Language), the children's mean rating was 2.6--poorest of the four scales. The children from a Spanish-language background were not rated as favorably as the other children on this scale, nor the boys as favorably as the girls.

On Scale *M* (Motor Development), the children, as a group, received their highest rating from their teachers. The mean rating of 2.2 on this scale is well above "average," and closely approaches "above average."

Discussion of the Results

The children in the sample pre-kindergarten classes were rated between "average" and "above average," as a group, in their level of development in the four areas measured (Personal Independence, Interpersonal Relations, Language, and Motor Development). The fact that their teachers gave them the most favorable ratings in motor development and least favorable ratings in language suggests that these pre-kindergarten children are more advanced in physical ability and coordination than in social and linguistic skills. This may well be due to the greater opportunities provided by the total environment of the disadvantaged child for the development and exercise of motor skills.

The handicap of a Spanish-language background seemed to have no bearing on the personal independence and motor development of the children, according to the teachers' ratings, but it did on the other two--interpersonal relationships and language. The Spanish-speaking children, as a group, received their poorest ratings on these last two scales.

On all scales except that of Motor Development, the teachers tended to rate the girls more favorably than the boys. This is in line with the fact that girls mature more rapidly than boys do.

CHAPTER 8

EFFECTS OF THE PROGRAM ON KINDERGARTEN CHILDREN WHO WENT TO PRE-KINDERGARTEN

(Based on Information Obtained from Questionnaires, Observations and Interviews)

On the days that the evaluators visited the kindergarten classes in the follow-up portion of the pre-kindergarten evaluation study, the teachers attached colored name tags to the children's clothing so that those pupils who had been in the Pre-Kindergarten Program could be distinguished from the others.

In kindergarten classes where almost all the children had been in the Pre-Kindergarten Program, the evaluators noticed that the children interacted cooperatively. This behavior pattern was not as well defined in the other classes. However, a majority of the kindergarten teachers who responded to the follow-up study questionnaire said they found no difference in the way the children got along with each other, whether they had attended pre-kindergarten or not.

In comparison with the other children in the observed classes, those who had been in the Pre-Kindergarten Program reacted more readily to teacher cues, behaved more appropriately, and showed more willingness to choose work that required concentration. More than half of the kindergarten teachers who filled in the questionnaires reported that the children in their classes who had attended pre-kindergarten usually were better able to take leadership roles, follow directions, and understand others.

The evaluators saw that, in the classrooms they visited, the children who had not come from the Pre-Kindergarten Program appeared to be more inclined to seek activities that permitted freedom of movement, and tended to be more boisterous and excitable. On the other hand, 57% of kindergarten teachers responding to the questionnaire said the number of behavioral problems was about the same among the children who came from pre-kindergarten as among those who did not. However, 78% of the kindergarten teachers noted that the average child who had attended pre-kindergarten was better able to accept separation from his parents or guardians.

Somewhat more than half of the kindergarten teachers said that the children in their classes who had attended pre-kindergarten were generally more attentive and showed a higher level of interest than the others. Almost half of the kindergarten teachers reported that the children with this pre-school experience engaged in exploratory behavior more often than the others did. In addition, a majority of the teachers found that the language skills of those children who had attended pre-kindergarten were better, on the average, than those of the others in terms of clarity of expression, ability to use words meaningfully, size of vocabulary, and fluency of speech.

In summary, the kindergarten classroom observations and the kindergarten teachers' responses on the questionnaires pointed to a finding that those children who had attended pre-kindergarten were, as a group, more advanced in their social, cognitive, and language development than the other children were.

CHAPTER 9

KINDERGARTEN INVENTORY

Background and Purpose. The Kindergarten Inventory was developed during the winter of 1969 for use in the follow-up part of the pre-kindergarten evaluation this year. All but two sections of the new inventory cover the same areas that were included in the Pre-Kindergarten Inventory. The parallel sections in the Kindergarten Inventory contain more items, however, and test the child's mastery of the subject areas more extensively.

The parts common to the Pre-Kindergarten and Kindergarten inventories are: Introductory Questions, Body Parts, Colors, Basic Concepts, Shapes, Mathematics, Science, and Self-Image. The two additional sections of the Kindergarten Inventory, Shades and Pre-Reading, were included to cover material that was observed being taught in the kindergarten classrooms. The Shades section contains three items that require the child to select the lighter or darker of two shades. The Pre-Reading section lists eight letters or short words. Each of them is printed along with three others. The child is called upon to point out the specified letter or word on the list in each group of four. There were also three items testing the child's understanding of the concepts of *same* and *different*.

Scoring the Inventory and Interpreting the Results. Scoring generally followed the procedure used for the Pre-Kindergarten Inventory. Most items were scored as either right or wrong, with one point being credited for a right response. On two items, *Birthday* and *Days of the Week*, the child earned 1 point for an adequate response, and 2 points for a more complete response. For *Wheels* and *Magnets*, each consisting of 6 items, the number of incorrect responses was subtracted from the number of correct responses. A child received credit for passing each of these parts if he achieved a score of 2 or better. The total score on the Inventory was computed by adding the number of points earned by the child on all the cognitive items.

Responses to the items in the Self-Image section were scored as 1 for the choice of the picture showing a happy child, 2 for the neutral choice, and 3 for the sad. These scores were not included in the total score for the Pre-Kindergarten Inventory because they do not test achievement.

Data Analysis. The data analysis for the Kindergarten Inventory followed the same procedures as for the Pre-Kindergarten Inventory. In addition, the performance of the children who had had pre-kindergarten experience and the performance of children who had not were compared.

The Pupil Sample. The Kindergarten Inventory was administered in May to 231 children. About one-half of this group had attended pre-kindergarten and the other half had not.

Results of Kindergarten Inventory

Introductory Questions. The Introductory Questions included a variety of items testing the child's knowledge of certain basic information about himself and his environment. Almost all the kindergarten children tested could give their full name and their age, although few could give either the month or day of their birth. (See Table 12 for the percentages of correct responses to each of the Introductory Questions.)

TABLE 12

Percentages of Correct Responses to Introductory Questions of Kindergarten Inventory

	Pre-Kindergarten Experience		No Pre-Kindergarten Experience		
	Spanish-Speaking (N=25)	Others (N=92)	Spanish-Speaking (N=35)	Others (N=79)	Total Group (N=231)
Name	94	99	91	94	95
Age	76	89	80	81	85
Birthday (month only)	16	12	8	14	13
(month and day)	16	32	14	28	26
Month	12	23	11	20	19
Day of Week	20	25	26	37	29
Days of Week (all)	32	40	11	34	33
(all, but not in order)	14	17	6	10	12
Right Hand	80	80	68	72	76
Left Leg	52	82	68	64	71
Left Hand	76	78	66	75	75
Right Leg	52	80	66	66	70

Nineteen per cent of the children could tell the examiner the name of the current month, and 29% could give the name of the current day. Forty-five per cent of the children tested were able to name the days of the week, and three-fourths of these said the names in the correct sequence. Between 70% and 76% of the children were able to identify each of the following body parts by pointing: right hand, right leg, left hand, and left leg.

Performance on all of the Introductory Questions except Days of the Week did not appear to be related to prior school experience, language background, or the sex of the child. On Days of the Week, the mean score of the children who attended pre-kindergarten was higher than those of the children who did not have this prior school experience. Likewise, boys tended to score higher than girls on this part, and the Spanish-speaking children tended to perform at a lower level than the others. None of these inter-group differences was statistically significant, however.

Body Parts. Identification of five body parts--foot, ear, chin, finger, and knee--was tested by this section of the Kindergarten Inventory. The child was asked to name each of these as the examiner pointed to it, and if the child could not, he was asked to point to the part when the examiner named it later. The part correctly named by the largest percentage of the total group was ear (97%), while the part that proved most difficult was knee (67%). All the body parts were correctly identified by either naming or pointing by at least 87% of the total group (Table 13).

TABLE 13

Percentages of Correct Responses to the Body Parts Items of the Kindergarten Inventory

	Pre-Kindergarten Experience (N=117)	No Pre-Kindergarten Experience (N=114)	Total Group (N=231)
Naming			
Foot	91	90	90
Ear	98	96	97
Chin	93	81	87
Finger	92	91	92
Knee	72	61	67
Naming or Pointing			
Foot	99	96	97
Ear	100	100	100
Chin	96	96	96
Finger	98	100	99
Knee	93	88	90

The mean score on the Body Parts section for the children who had had pre-kindergarten experience was 9.3 out of 10, with a range from 5 to 10. The children who had not had pre-kindergarten experience obtained a mean score of 9.0, and their scores ranged from 3 to 10 (Table 14).

The difference was due entirely to the scores of children who did not have a Spanish-language background. Among the children of Spanish-language background, those who had not attended pre-kindergarten had a mean score as high as those who had had that experience. Among the other children, the higher mean of the pupils from pre-kindergarten, as compared with those who had not been in the program, very closely approached the .05 level of statistical significance (Tables 15 and 16).

Although boys and girls averaged about the same on this section, the Spanish-speaking children, as a group, did not score as well as the others.

TABLE 14

Means and Standard Deviations of the Kindergarten Inventory Scores

	Pre-Kindergarten Experience						No Pre-Kindergarten Experience					
	Spanish-Speaking (N=25)		Others (N=92)		Total (N=117)		Spanish-Speaking (N=35)		Others (N=79)		Total (N=114)	
Section	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
Body Parts	8.0	1.42	9.7	.64	9.3	1.11	8.0	1.53	9.4	1.26	9.0	1.50
Colors	12.2	3.01	13.5	1.33	13.2	1.89	12.1	3.37	12.1	3.44	12.2	3.38
Basic Concepts	7.4	1.61	9.1	1.47	8.7	1.65	7.7	1.83	8.7	1.70	8.4	1.80
Shapes	4.6	2.29	6.3	1.70	6.0	1.96	4.5	2.31	5.0	2.18	4.8	2.22
Mathematics	10.5	1.69	11.3	1.59	11.1	1.63	10.5	1.62	10.7	1.96	10.6	1.86
Pre-Reading	6.9	.98	6.8	1.31	6.8	1.25	7.0	1.08	6.4	1.46	6.6	1.37
Science	9.7	3.54	12.0	2.58	11.5	2.96	10.0	2.88	10.8	3.31	10.6	3.20
Total Score	69.4	11.42	81.3	8.87	78.8	10.62	70.3	11.11	75.0	13.60	73.6	13.02

Colors. On the Colors section of the Kindergarten Inventory, the children were required to identify by naming--or by pointing, if they were unable to name--the colors red, blue, green, yellow, and orange, and the shades black and white. The mean for the group who attended pre-kindergarten was 13.2 out of 14, and the range was 5 to 14. For the children who had not attended pre-kindergarten, the mean was 12.2, and the range was 0 to 14.

TABLE 15

Mean Scores on the Kindergarten Inventory, by Language Background and Pre-Kindergarten Experience, with T-Ratios for Subgroup Differences

	Means of Spanish-Speaking Children			Means of Others		
	Pre-Kindergarten Experience (N=25)	No Pre-Kindergarten Experience (N=92)	T-Ratio	Pre-Kindergarten Experience (N=35)	No Pre-Kindergarten Experience (N=79)	T-Ratio
Body Parts	8.0	8.0	.00	9.7	9.4	1.91
Colors	12.2	12.1	.07	13.5	12.1	10.67**
Basic Concepts	7.4	7.7	.76	9.1	8.7	1.46
Shapes	4.6	4.5	.13	6.3	5.0	4.48**
Mathematics	10.5	10.5	.08	11.3	10.7	1.97*
Pre-Reading	6.9	7.0	.39	6.8	6.4	1.48
Science	9.7	10.0	.37	12.0	10.8	2.61**
Total Score	69.4	70.3	.30	81.3	75.0	3.48**

*Significant at .05 level

**Significant at .01 level

TABLE 16

Variables Significantly Related to Performance on the Kindergarten Inventory

Section	Variable	F-Ratio
Body Parts	Language	80.6**
Colors	Sex	7.9**
Basic Concepts	Language	27.6**
Shapes	Sex	5.2*
Shapes	Language	12.6**
Shapes	Pre-Kindergarten Experience	4.8*
Science	Language	13.6**
Total Score	Language	24.1**

*Significant at .05 level

**Significant at .01 level

Among the children who had language backgrounds other than Spanish, performance was clearly improved by having had pre-kindergarten experience. In this group, the mean score of those who had been in the program was significantly higher than the mean of those who had not. The Spanish-speaking children, however, did not perform any better, on the average, as a result of having participated in the pre-kindergarten program.

The percentage of correct responses is increased when those of children who could point to the color are added to those of children who could name it. Spanish-speaking children had as high mean scores as the others, and in both groups the girls had a higher average than boys in identifying colors.

TABLE 17

Percentages of Correct Responses to the Color Items of the Kindergarten Inventory

	Pre-Kindergarten Experience (N=117)	No Pre-Kindergarten Experience (N=114)	Total Group (N=231)
Naming			
Red	97	85	91
Yellow	94	83	89
Orange	91	79	85
Green	87	79	83
Blue	94	83	89
White	94	89	91
Black	93	90	92
Naming or Pointing			
Red	98	91	95
Yellow	97	89	94
Orange	99	89	94
Green	93	83	88
Blue	97	90	94
White	98	91	95
Black	97	95	96

Between 87% and 97% of all the youngsters who had attended pre-kindergarten could name each of the crayons used to test knowledge of colors, as compared with 83% to 90% of all the other children. The percentage of correct responses is increased when those children who could point to the color are added to those of children who could name it.

Spanish-speaking children did as well as the others on this section of the test. Regardless of language background, however, the girls had a higher average than the boys in identifying colors.

Shades. The child's ability to discriminate between shades was assessed by three items which called for a choice between the darker and lighter of two paper squares. Between a gray square and a black square, 88% of the total group correctly chose the black as the darker. Seventy-nine per cent of the children correctly identified the lighter of two shades of blue. Ninety per cent were able to select the darker of two shades of green (Table 18).

TABLE 18

Percentages of Correct Responses to the Shades Items of the Kindergarten Inventory

Shade	Pre-Kindergarten Experience (N=117)	No Pre-Kindergarten Experience (N=114)	Total Group (N=231)
Darker (black-gray)	88	89	88
Lighter (blue)	82	75	79
Darker (green)	85	95	90

Performance on these items showed no significant relation to the children's prior experience in pre-kindergarten, sex, or language background.

Basic Concepts. The Basic Concepts section tested ability to identify twelve concepts that are frequently found in primary-school curricula, and which are likely to be fundamentally important in academic learning. Those children who had attended pre-kindergarten attained a mean score of 8.7 on this section, with a range from 5 to 12. The mean of those who had not attended pre-kindergarten was 8.4; their range was 4 to 12. Prior school experience did not prove to be significantly related to performance on this section, nor did the boys' and girls' means differ significantly.

The percentages of correct responses of the total group on the individual items varied from a high of 98% for the concept of closest to a low of 13% for fewest (Table 19).

TABLE 19

Percentages of Correct Responses to the Basic Concepts Items of the Kindergarten Inventory

Basic Concept	Pre-Kindergarten Experience (N=117)	No Pre-Kindergarten Experience (N=114)	Total Group (N=231)
Over	87	87	87
Inside	91	90	91
Behind	74	63	68
Closest	99	97	98
Most	89	89	89
Widest	83	82	83
Under	93	95	94
Outside	85	76	81
In front of	90	82	86
Furthest	29	24	26
Fewest	9	17	13
Narrowest	41	39	40

Overall, the scores of the Spanish-speaking children were not as high as those of the other youngsters, and this held true when comparisons were restricted to those of both groups who had attended pre-kindergarten.

When the children were classified by language background, sex, and pre-kindergarten experience, the girls of Spanish-language background were found to have significantly lower means than the other girls, regardless of whether or not they had been in the pre-kindergarten program. The Spanish-speaking boys fell significantly below the other boys in mean score only within the pre-kindergarten-trained classification, however.

Shapes. Identification of four geometric shapes was tested through a procedure similar to that used for knowledge of parts of the body. If a child could not give the name for circle, square, triangle, or rectangle, he was asked to point to it later on when the examiner named it. The mean score for the children who had attended pre-kindergarten was 6.0, and the range of scores was 1 to 8. The children who had not had pre-kindergarten experience had a mean of 4.8, with a range of 0 to 8.

Those children who had been in the pre-kindergarten program surpassed the others in mean score on this section of the inventory. Higher percentages of the pre-kindergarten-trained group could identify each of the shapes by naming or pointing.

TABLE 20

Percentages of Correct Responses to Items on Shapes Section of Kindergarten Inventory

	Pre-Kindergarten Experience (N=117)	No Pre-Kindergarten Experience (N=114)	Total Group (N=231)
Naming			
Circle	91	83	87
Square	72	52	62
Triangle	72	47	60
Rectangle	27	13	20
Naming or Pointing			
Circle	99	96	98
Square	84	65	74
Triangle	85	76	80
Rectangle	69	49	59

The effects of a Spanish-language background were evident on this section of the inventory, but only in connection with pre-kindergarten training. Among the children who had had this training, the Spanish-speaking children fell below the others in mean score.

Sex was also a factor that showed a significant relation to ability to identify geometric shapes. The average performance of the girls was better than that of the boys in the group as a whole. The differences between the means of the girls and boys were not significant in the language-background or pre-kindergarten experience subgroups, however.

Same-Different. Almost all (99-100%) of the children were able to point to the two of three pictures that were the same in two sets, and 67% could point to the one picture of three that was different in a third set.

Mathematics. A variety of questions tested the children's understanding of mathematics. Almost all (99%) of the children could identify the biggest of several paper squares, and 70% could identify the smallest. Between 46% and 66% correctly indicated the first, middle, and last in a row of five wooden blocks. When shown a printed number and asked to select the same number from several on a chart, almost all (99%) of the children could correctly match each of the following numbers: 0, 2, and 5. Fewer, 86%, could match the two 9's, and 93% matched the 6's. In block counting, 96% of the children were able to count 3, 92% could count 6, and 85% counted 10 (Table 21).

TABLE 21

Percentages of Correct Responses to Items on Mathematics Section of Kindergarten Inventory

	Pre-Kindergarten Experience (N=117)	No Pre-Kindergarten Experience (N=114)	Total Group (N=231)
Biggest	99	100	99
Smallest	72	69	70
Last	55	58	56
Middle	68	63	66
First	49	44	46
Matching Numbers			
"9"	90	82	86
"2"	99	100	99
"6"	98	87	93
"0"	99	100	99
"5"	99	98	99
Counting Blocks			
"6"	95	87	92
"3"	99	93	96
"10"	88	82	85

The mean score on the Mathematics section for the children who did not have pre-kindergarten training was 10.6, with a range of 5 to 13. For the children who had had pre-kindergarten experience, the mean score was 11.1, and the range was 6 to 13. Those who were not from a Spanish-speaking background and had pre-kindergarten experience obtained a mean score that was significantly higher than that of the children who had not attended pre-kindergarten classes. Spanish-speaking children scored the same, on the average, whether they had attended pre-kindergarten or not.

Overall, there was no significant difference between the means of the boys and the girls, or between those of the Spanish-speaking children and the others.

Pre-Reading. The mean score on the Pre-Reading section of the children who had pre-kindergarten experience was 6.8 out of 8, and the scores ranged from 3 to 8. Those children who did not have pre-kindergarten experience obtained a mean score of 6.6, and their range was 3 to 8. The difference between the mean scores was not statistically significant.

TABLE 22

Percentages of Correct Responses to Pre-Reading Items of Kindergarten Inventory

	Pre-Kindergarten Experience (N=117)	No Pre-Kindergarten Experience (N=114)	Total Group (N=231)
"g"	100	99	99
"n"	91	88	90
"as"	99	99	99
"us"	91	82	87
"may"	72	73	72
"dog"	68	68	68
"call"	84	81	82
"stop"	72	72	72

Almost all (99%) of the children in the total group tested gave correct responses for the letter g and the word as. Somewhat fewer (90%) earned credit for n, and 87% for us. The three-letter and four-letter words proved somewhat more difficult. The percentages of correct responses were 82%

for call, 72% for may and stop, and 68% for dog (Table 22).

Performance on this section was not related to the child's sex or language background.

Science. As in the Pre-Kindergarten Inventory, the Science section of the Kindergarten Inventory was designed to measure the children's understanding of weather and its effects, wheels, and magnets. The mean score for children who had attended pre-kindergarten was 11.5, and the range of scores was 4 to 15. The children who had not been in pre-kindergarten achieved a mean of 10.6, and had a range of 1 to 15. The maximum possible score on this section was 15.0.

Pre-kindergarten experience was a significant factor in performance on this section, but only among those children who were not of Spanish-language background. In this group, the youngsters who had attended pre-kindergarten attained a mean score that was significantly above that of the children who had not had this pre-school experience.

TABLE 23

Percentages of Correct Responses to Science Items of Kindergarten Inventory

	Pre-Kindergarten Experience (N=117)	No Pre-Kindergarten Experience (N=114)	Total Group (N=231)
Rainy	96	95	95
Windy	72	73	72
Snowy	80	83	82
Sunny	96	87	91
Warm out	67	62	64
Cold out	36	30	33
Wind does to a flag	81	80	80
Wheels	98	94	96
Shape of a wheel	77	55	66
Wheels on a bicycle	71	60	65
Magnet	59	53	56

The percentages of correct responses to the weather items ranged from 72 to 96 for the total group of children who had attended pre-kindergarten. For the youngsters who had not been in the pre-kindergarten program, the percentages ranged from 73 to 95. While about 80% of the total group of children could say what wind does to a flag, relatively few (about 30%) could tell what happens to water when it gets very cold outside.

More than 98% of the children with pre-kindergarten experience, and 94% of the others, were able to select the toys that had wheels and reject those that did not. Approximately 56% of the children in each of these groups could select the items a magnet could pick up, and reject the others (Table 23).

Sex was not a significant factor on the Science section, but language background was. Among the children who had attended pre-kindergarten, the mean level of performance of the Spanish-speaking children was not as high as that of the others. No differences appeared among the language groups who had not had pre-kindergarten experience (Table 15).

Total Score. The mean score on the Kindergarten Inventory as a whole, excluding the Self-Image section, for the children who had attended pre-kindergarten was 78.8, and the scores ranged from 48 up to the maximum possible--98. The children who had not attended pre-kindergarten obtained a mean of 73.6, and had a range from 37 to 98. Colors was the section of the inventory where the children who had pre-school experience did best, in terms of the percentage of right answers. Basic Concepts was the area that gave the children the most difficulty. The children who had not attended pre-kindergarten achieved their highest mean score on Colors, also, and their lowest means were on Shapes and Basic Concepts.

There was no significant difference between the total-score means of the Spanish-speaking children who had pre-kindergarten experience and those who had not. Among the others, those who did not have the Spanish-language handicap, children who had been in the pre-kindergarten program obtained a higher mean total score than those who had not been in it.

While sex was not significantly related to the total scores of the children, language background was. The mean total score of the Spanish-speaking children was not as high as that of the others.

Self-Image. On each of the three sample items of this section, one of the three pictures (happy, neutral, or sad) was deemed to represent a child's typical feelings in the situation described. The children in the group tested generally selected the appropriate picture.

Five of the test items dealt with the child's attitude toward school and school-related situations. Most of the children responded by pointing to the happy or neutral picture, rather than to the sad one. Three items were included to assess the child's feelings toward himself. On each of these, about one-half to two-thirds of the children selected the happy picture.

On none of the items in this section did sex, pre-kindergarten experience, or language background prove to be significantly related to the responses.

TABLE 24

Percentages of Responses to Pictures in Self-Image Section of Kindergarten Inventory

	Pre-Kindergarten Experience			No Pre-Kindergarten Experience		
	Spanish-Speaking (N=25)	Others (N=92)	Total (N=117)	Spanish-Speaking (N=35)	Others (N=79)	Total (N=114)
Point to the picture that shows how you feel:						
When you are eating ice cream						
Happy	67	77	74	74	80	78
Neutral	21	12	14	20	9	12
Sad	12	11	11	3	11	9
When you hurt yourself						
Happy	0	0	0	6	1	3
Neutral	21	18	19	9	23	18
Sad	79	82	80	83	76	78
When you are walking						
Happy	33	23	25	54	24	26
Neutral	50	70	70	34	63	59
Sad	17	8	9	8	13	14

TABLE 24 (Cont'd.)

Percentages of Responses to Pictures in
Self-Image Section of Kindergarten Inventory

	Pre-Kindergarten Experience			No Pre-Kindergarten Experience		
	Spanish-Speaking (N=25)	Others (N=92)	Total (N=117)	Spanish-Speaking (N=35)	Others (N=79)	Total (N=114)
When you get to school in the morning						
Happy	50	59	56	37	57	56
Neutral	42	29	32	37	30	32
Sad	4	12	10	23	13	11
When you are doing things at school						
Happy	29	30	33	37	40	39
Neutral	38	47	44	31	33	34
Sad	33	23	25	28	26	25
When you are with your teacher						
Happy	42	40	40	57	34	35
Neutral	16	30	27	31	35	34
Sad	42	29	32	8	30	30
When you play with the other children in your class						
Happy	63	73	70	46	67	64
Neutral	25	18	20	37	15	20
Sad	12	9	9	14	18	15
When the teacher asks you to help her						
Happy	25	34	32	46	33	37
Neutral	50	42	44	37	42	40
Sad	25	24	24	14	25	22
When you look at yourself in the mirror						
Happy	54	72	68	66	58	60
Neutral	38	22	25	23	30	28
Sad	8	6	7	9	11	11

TABLE 24 (Cont'd.)

Percentages of Responses to Pictures in
Self-Image Section of Kindergarten Inventory

	Pre-Kindergarten Experience			No Pre-Kindergarten Experience		
	Spanish-Speaking (N=25)	Others (N=92)	Total (N=117)	Spanish-Speaking (N=35)	Others (N=79)	Total (N=114)
When you think about how big you are getting						
Happy	46	56	54	51	62	59
Neutral	33	33	32	37	32	33
Sad	21	11	13	8	6	7
Right now						
Happy	33	52	48	48	49	49
Neutral	42	34	35	23	33	30
Sad	25	14	16	26	18	20

Discussion of the Kindergarten Inventory Results

Among the kindergarten children who did not have a Spanish-language background, those who had been in the Pre-Kindergarten Program during the previous year generally performed significantly better than those who had not had the benefit of this experience. The children who had been in the program knew their colors, geometric shapes, mathematics, and science significantly better than the others did. Even on those sections where the difference in performance was not statistically significant, the margins were consistently in favor of the children with pre-kindergarten experience. No such trend was evident, however, among the Spanish-speaking youngsters.

On the Kindergarten Inventory as a whole, the Spanish-speaking children who had been in the Pre-Kindergarten Program did not perform significantly better than the Spanish-speaking youngsters who had not had this experience. There were no significant differences between the mean scores of these two groups on any of the sections of the Inventory.

It seems evident that the Pre-Kindergarten Program is enhancing the cognitive development of the majority of the children who receive this pre-school enrichment. However, Spanish-speaking children evidently face a language handicap that prevents them from benefiting substantially from the program.

Regardless of whether or not they had attended pre-kindergarten, the children with a Spanish-language background generally failed to match the performance of their classmates, who were mainly of English-language background. This difference in performance was statistically significant on the Body Parts, Basic Concepts, Shapes, and Science sections of the Inventory, and it was also reflected in the total score means.

The weaker performance of the Spanish-speaking children in the cognitive areas tested may be attributable to several factors. For one, the Kindergarten Inventory is essentially oriented toward an English-speaking population. Despite the examiner's attempts to administer portions of the test in Spanish when necessary, it is possible that some Spanish-speaking youngsters did not fully understand what the test required of them. More importantly, a Spanish-language background no doubt impedes a child's learning in the majority of pre-kindergarten and kindergarten classes. The teaching in these classes is almost exclusively in English. Although bilingual paraprofessionals are present in some classrooms where many of the children are Spanish-speaking, the bilingual skills of these aides are rarely applied to the teaching situations.

Except in the case of children with Spanish-language backgrounds, the results of the Kindergarten Inventory indicate that the Pre-Kindergarten Program had stimulated children's cognitive development enough to produce significant carry-over effects through the kindergarten level. Evidence of similar effects in the areas of self-image and school attitudes was not obtained, however.

CHAPTER 10

TEACHERS' RATINGS OF THE KINDERGARTEN CHILDREN ON THE DEVELOPMENTAL SCALES

(Kindergarten Follow-up Study)

The New York Child Development Scales, which were described in Chapter 7, were distributed in early May to 16 kindergarten teachers whose classes were included in the kindergarten follow-up study. Each teacher received forms for all her children in the observation sample. Of approximately 300 forms sent out, 285 were returned to the evaluators. The scoring procedures were the same as those outlined in Chapter 7.

Results of the New York Child Development Scales

On the Personal Independence scale, the children who had attended pre-kindergarten received a mean rating of 2.3; those who had not attended had a mean rating of 2.5, which is the less favorable (Tables 25 and 26).

TABLE 25

Mean Rating Values on the New York Child Development Scales for the Children in the Follow-up Study

	Pre-Kindergarten Experience				No Pre-Kindergarten Experience			
	Spanish-Speaking		Others		Spanish-Speaking		Others	
	N	Mean	N	Mean	N	Mean	N	Mean
Scale A (Personal Independence)	40	2.5	110	2.3	42	2.8	94	2.5
Scale B (Interpersonal Relations)	40	2.5	110	2.4	42	3.1	94	2.5
Scale L (Language)	39	3.1	110	2.7	41	3.5	90	2.8
Scale M (Motor Development)	40	2.2	109	2.1	42	2.6	93	2.2

The girls' average ratings were significantly better than those of the boys, and the Spanish-speaking youngsters had an average rating that was less favorable than that of the others.

On the Interpersonal Relations scale, the Spanish-speaking children who had attended pre-kindergarten were rated better than the others with the same language background who did not have this pre-school experience. The sample group as a whole had no significant differences between the means of boys and girls on this scale, nor between the means of the two different language-background groups.

TABLE 26

T- and F-Ratios Reflecting Effects of Prior School Experience, Language, and Sex Factors on Rating on New York Child Development Scales (Follow-up)

Scales	T-Ratio (School Experience)		F-Ratio	
	Spanish-Speaking	Others	Sex	Language
Scale A (Personal Independence)	1.30	.44	8.84**	4.57*
Scale B (Interpersonal Relations)	2.42*	1.04	1.14	3.51
Scale L (Language)	1.43	1.73	.47	8.37**
Scale M (Motor Development)	1.50	.33	1.91	1.11

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*Significant at .05 level

**Significant at .01 level

The average rating on the Language scale of children who had been in the Pre-Kindergarten Program was 2.7, as compared with the less favorable mean rating of 2.8 for those who had not been in the program. This difference was not statistically significant, however, nor was that between the means of boys and girls. The Spanish-speaking children were rated significantly less favorably than the others on this scale, though.

On the Motor Development scale, the mean rating of children who had attended pre-kindergarten was 2.1, and the average for those who had not attended was 2.2. So far as the teachers' ratings show, the child's school experience, sex, or language background had no significant effect.

Discussion of the Development Scales Results

The differences between the ratings of those children who had attended pre-kindergarten and those who had not were not statistically significant on any of the scales. Nevertheless, a consistent trend was noted in that the children with the pre-school experience received better mean ratings on all four scales (Personal Independence, Interpersonal Relations, Language, and Motor Development).

As was the case for the pre-kindergarten group that was rated this year, the Spanish-speaking kindergarten children received somewhat poorer ratings than the others on two of the four scales. The Spanish-speaking children who had attended pre-kindergarten were rated superior to those children who had not on the Personal Independence and Interpersonal Relations Scales. At both class levels, the Spanish-speaking children received less favorable mean ratings than the others on the Language Development scale.

CHAPTER 11

EVALUATIVE OVERVIEW

The appraisals and recommendations presented in this chapter are based on the findings described in the preceding sections of this report.

Effectiveness of Implementation

The attractiveness of the classrooms and displays, the abundance of most materials, and the physical arrangements in the classrooms of most of the schools (described in Chapter 3) were found to contribute greatly to the effectiveness of the program. This very effectiveness, however, pointed to the need for correcting certain shortcomings that were observed by the evaluators or brought to their attention.

If the generally colorful and varied bulletin board layouts had been brought down to the children's eye-level in some classrooms, as had been done in others, the displays would have been seen by more pupils.

Although supplies were generally ample, gaps hampered the work in some pre-kindergartens. This was especially true of the relatively small amount of science materials available. The frequently noted inadequate supply of blocks, especially hollow blocks, and the limited amount of space for block-building also handicapped efforts to allow the children to explore and experiment with various geometric shapes and develop their manual dexterity. This same point was made in last year's evaluation report.

Teachers might have benefited from discussions of ways to plan their classrooms so as to allow more space for block-building. Teacher time could have been saved and the relatively few complaints of delay in receiving supplies and equipment obviated if the processing of orders could have been simplified.

As mentioned earlier in this report, questionnaire data indicated that some pre-kindergarten classes were deficient in basic equipment such as children's cubbies, playground space and equipment, and toilet facilities.

When a child has a place to store his own belongings, his sense of being an individual is enhanced. Playgrounds equipped especially for small children and separated from the area used by the older pupils are necessary to provide an appropriate setting for the energy outlet that youngsters need. When washrooms were not adjacent to the classroom, children had to be escorted to and from the toilets, and they lost some opportunities for developing self-reliance in taking care of their personal needs.

The warm, responsive attitude of the teachers and the good rapport they established with both children and classroom aides led to substantial interaction of teachers and other adults with the pupils. Relaxed teaching styles and encouragement of informal conversation fostered the learning process. This was additionally enhanced by the attempts made by most teachers to develop incidental learning experiences during organized group activities and free play. Need was seen, however, for more effectively stimulating spontaneous questioning and real problem-solving by the children.

The necessity for more teaching in large groups than was desirable was attributed to the fall strike that left teachers trying to compress as much instruction as possible into the remainder of the school year. However, it appears to the evaluators that individualized and small-group lessons are essential to the program, and that the time needed for these types of instruction might have been gained by training classroom aides to the point where they could participate in the actual teaching.

Between the first and second visits of the evaluators, the effectiveness of the teaching in observed classes had improved noticeably. Evidently the teachers had been implementing suggested changes.

In expanding the roles of paraprofessionals in pre-kindergarten teaching, it seems clear that a more extensive program of training, begun before the start of the school year, would have permitted many more classroom assistants to perform this important function. Their enthusiasm for such training sessions as they had suggests that they would welcome an expanded program.

In general, the evaluators agreed with those members of the program's staff who had urged more balanced, more varied, and more appetizing lunches for the children and more consultation w[illegible] teachers and parents in preparing menus. Proper diet is, of course, essential to the health and welfare of young children. But, in addition, those who are responsible for meals in pre-kindergarten should take into account the children's tastes as influenced by their cultural background.

Accomplishments of the Program

Program participation had definitely enhanced the development of the children, according to the evidence obtained from all the evaluation sources of this study. The evaluators noted that the children they observed had become more independent and outgoing during the interval between the first and final evaluation visits. In the spring, the children responded easily to simple directions; they washed their hands without being told to do so before the juice and lunch periods, and poured their own juice; they worked independently, respected each other, conversed with each other more, and expressed their own opinions.

Both the evaluators' observations and the teachers' ratings indicated that the program had successfully achieved its goals so far as the children's social, emotional, and linguistic and physical development were concerned. Their development in the areas of personal independence and interpersonal relations was rated generally between "average" and "above average." This progress, also noted by parents who responded to a questionnaire, shows the strength of the Pre-Kindergarten Program in enhancing the children's growth in areas other than knowledge and understanding (Table 27).

The children's development of a degree of personal independence is important in enabling them to perform effectively in the classroom, with less dependence on their teacher and more self-reliance. As they learn to make judgments on their own, they begin to approach problems systematically.

The development of the children's ability to form relationships with others helps them to get along with their classmates, recognize the limits of socially acceptable behavior, and work cooperatively.

Language-skill development is an essential prerequisite for learning to read. In addition, language skills facilitate the process of thinking. As the child's ability to express himself improves, he is able to make his needs known more readily, raise more questions that lead to learning, and converse with others more freely.

TABLE 27

Developmental Scale Items Passed By At Least 50% of the Pre-Kindergarten Children Tested

Scale A

Evaluates his behavior; probably praises himself and his products uncritically

Shows judgment of difficulty of various activities; generally undertakes those within his ability, although he may need some help

Accepts responsibility for cleaning work place, and for replacing materials; may need encouragement

Begins to show discrimination in evaluating his performance; wants product to conform to original idea and to function crudely

Wants to finish what he has started, if the work is interesting and within his ability, even if it takes several days

Scale B

Plays cooperatively with a group of two to five children; interaction is not necessarily continuous

Sustains interest for long period in dramatic play with others

Comforts other children when they cry or have been hurt

Shares tools and equipment voluntarily with others within organized work group

Expresses anger; form of expression begins to be verbal rather than physical

Scale L

Articulates clearly all sounds; possible exceptions th, zh, wh, triple consonants like str, sts

Reports in some detail events recently experienced or witnessed

Adapts his language to role of mother, father, etc. in dramatic play

Recognizes and gives correct name for common colors

Asks questions for the definite purpose of obtaining information

Scale M

Goes up and downstairs, feet alternating, without need for holding railing or adult's hand

Runs, jumps, gallops, and sways in time to music

Skips, using feet alternately

Places large blocks to make surface plans have right angles; e.g., floor plans of a house

Cuts and pastes simple forms

Improvement of muscular skills and coordination helps the child to channel his energies into activities that are constructive, pleasurable, and socially acceptable within the classroom setting. For example, coordination of finger muscles is necessary for writing, using scissors, turning pages of books, buttoning clothing, and many other routine activities of daily living.

The children apparently had adopted a positive attitude toward school and learning by the end of the year. The results of the Self-Image section of the Pre-Kindergarten Inventory suggested this, and also that they viewed themselves in a favorable light. They appeared to be happy when the evaluators saw them in the classrooms, and parents reported that their children were happier at the end of the school year than they had been at the beginning.

In many ways, the teachers inculcated in the children a sense of self and a pride in cultural heritage, the evaluators observed. Displays of ethnic pictures, as well as conspicuous identification of each child's belongings as his own helped develop the sense of self. Stories selected specifically for the Negro and Spanish-speaking children led them to have greater respect for their own backgrounds.

The children's Pre-Kindergarten Inventory scores indicated that they had acquired substantial knowledge in the main content and concepts areas of the Pre-Kindergarten Curriculum (Table 28). By the end of the school year, most of the children were well able to identify six parts of the body by naming or pointing, demonstrate their understanding of many basic concepts found in primary-grade curricula, and identify colors frequently named in the classroom. These were the areas where their percentages of correct responses were greatest. In the areas of geometric shapes, introductory science information and rudimentary mathematical concepts, the children did not do quite as well. Since the Curriculum Guide seems to place about as much emphasis on these areas as on the others, instruction in mathematics and science apparently needs some strengthening.

The children's high level of performance on the Pre-Kindergarten Inventory indicated that they had generally reached the goals set for them by the Pre-Kindergarten Program. This program's curriculum is designed to equip pupils with certain basic skills and information that are the foundation for later learning.

Understanding of basic concepts is essential for learning in the school environment, because the primary-grade curricula are constructed with the assumption that children entering these grades have such an understanding. In addition, training in the basic concepts enables a child to form generalizations, see similarities and differences, and make comparisons and discriminations--all leading to improved abilities in learning, thinking, and problem-solving.

The mathematical principles introduced in the Pre-Kindergarten Curriculum--such as size relationships, counting, and linear relationships--are the building blocks for learning higher-level mathematical concepts. The child learns to think in quantitative terms--to count, and to recognize geometric shapes.

Perception and discrimination of forms and colors underlie the ability to learn to read. Learning to associate words with colors, shapes, and body parts readies the child for the symbolic representation of the written word.

Exposure to various aspects of science, such as magnets and wheels, gives the child an opportunity to explore his environment and encourages experimentation in other areas. It also provides specific information about the environment, and lets the child feel that he is really learning.

TABLE 28

Pre-Kindergarten Inventory Items Passed By At Least 50% of the Children Tested

Identifying self: name, age

Identifying parts of the body: nose, foot, ear, finger, leg, head

Identifying colors: red, yellow, green, blue, white, black

Understanding basic concepts: open, softest, off, inside, over, hottest, behind, closed, hardest, on, outside, under, coldest, in front of

Mathematics: understanding number concepts--one, two, three, four, five; ordering--first, middle, last; using size relationships--biggest, smallest

Identifying geometric shapes: circle, square, triangle

Science: recognizing weather conditions--rainy, snowy, windy, sunny; identifying objects with wheels

The poorer performance of children who had a Spanish-language background lowered the overall pupil average, although they did not do badly on the inventory. Because of their lower overall average, the effectiveness of the program staff in communicating with them is questionable. The Pre-Kindergarten Program apparently has not dealt adequately with the Spanish-speaking youngster's language handicap. These children evidently have not been taught enough English for them to benefit fully from their classroom experiences. Truly bilingual teachers or paraprofessionals are needed in classes that enroll large numbers of Spanish-speaking children.

Improved parent-school relationships were effected in many ways, the evaluators found. Through a variety of means, parents became more involved with the school and more interested in their children's education. Practically all parents seemed to be pleased with the program, and some made use of the parents' room. Additional methods might be introduced to stimulate even more parent participation. For example, if family workers and teachers would meet more often with parents in a shared search for ways to improve the children's progress in school, the Pre-Kindergarten Program as a whole might be strengthened.

Parents' interest might be stimulated further by improving their understanding of the goals and processes of the Pre-Kindergarten Program and by giving them suggestions about the role they can play at home in enriching their children's learning experiences.

Since local communities in New York City are beginning to design and implement special educational and cultural enrichment programs for their neighborhoods, they might welcome guidance and suggestions about appropriate curriculum materials. Excellent reference sources would be the "Pre-Kindergarten Curriculum Guide" and the "Handbook for Language Arts," which the Board of Education would no doubt make available to community groups.

In summary, the Pre-Kindergarten Program is evidently meeting its objectives of enhancing the children's cognitive, social, and emotional development, and improving their school attitudes and self-image. In addition, parent-school relationships and parental involvement in the program are strong. If greater attention would be given to the language handicaps of Spanish-speaking children, the program probably could become even more successful.

Findings of the Kindergarten Follow-Up Study

Among children who did not have a Spanish language background, those who had been in the Pre-Kindergarten Program during the previous year generally performed significantly better on the Kindergarten Inventory than children who had not had the benefit of this experience. Their knowledge of colors and geometric shapes, as well as their comprehension of concepts related to mathematics and science, was significantly better, and they obtained consistently higher mean scores on the other sections of the Inventory. Spanish-speaking children who had been in the Pre-Kindergarten Program, however, did not perform significantly better than other Spanish-speaking youngsters. The observations of the evaluators during their visits to kindergarten classrooms confirmed these comparisons.

The Kindergarten Inventory results pointed up the Pre-Kindergarten Program's success in enhancing the cognitive development of poverty-area children. The results also indicated that the program has failed to deal effectively with children who have a Spanish-language background.

On the New York Child Development Scales, no statistically significant differences in mean ratings distinguished the children who had attended pre-kindergarten from those who had not. Nevertheless, superior ratings for the children with the pre-school experience formed a consistent trend. This trend indicates that the Pre-Kindergarten Program contributed to the social, emotional, linguistic, and motor development of the children enrolled in it.

The kindergarten classrooms observed were bright and cheerful, and were similar to the pre-kindergarten classrooms in many respects. However, the materials in the rooms were not arranged to form as many distinct units for play and investigation, nor were the materials as abundant, as in the pre-kindergartens. This disparity in materials and in clarity of play areas might have initially confused and frustrated the children who had spent a full school year in pre-kindergarten.

The kindergartens tended to combine two styles of teaching. One was the "developmental" approach (structuring the program to deal with all aspects of the child's development) that characterizes the pre-kindergartens. The other closely approximated the form of unified group instruction prevalent in grade schools. This was in contrast to the much stronger emphasis on the developmental approach that the evaluators had observed in the sample pre-kindergarten classes they visited.

In most of the kindergartens, the curriculum coverage was similar to that in the pre-kindergarten classes--colors, shapes, mathematical concepts, and so on, as well as basic information such as names and addresses, and right-left orientation. However, pre-reading training was stressed heavily and consistently in the kindergartens.

Much of the kindergarten curriculum content did not seem to build effectively on material covered during the pre-kindergarten year. More definite articulation and correlation between the Pre-Kindergarten and Kindergarten Programs is essential if the broad-based experience provided by the former is to be utilized effectively. In view of the fundamental structural similarity of the two programs, coordination of the curricular and instructional approaches should not be difficult to achieve. Now that the Pre-Kindergarten Program has completed its fifth year in the public schools, and appears to be well established, this step toward coordination of these early childhood programs is timely.

A series of teacher workshops, progressing from the school to the district levels, and permitting teachers from both programs to share educational theories and to explore questions of curriculum articulation, might be an important initial step toward coordinating the programs. (On the questionnaires, many teachers indicated their interest in communication of this kind.) At these meetings, new approaches to curricula being developed within the field of early childhood education could be brought to the teachers' attention.

This articulation and coordination is, of course, important only for the children who have attended pre-kindergarten. To maximize the advantages they have received, they should be put together to form a kindergarten class unit when this grouping is possible.

The above suggestions would benefit the pre-school child when he enters kindergarten, but would still leave the basic problem unresolved as the children progress to the early grades. The question of whether to make up grade-school classes entirely of children who have had pre-school enrichment, or whether to include in each class some who have not had this exposure, would be obviated, of course, if the Pre-Kindergarten Program could enroll every child in New York City's poverty areas.

The evaluators observed divergent teaching styles among the kindergarten teachers--more pronounced than was the case among the pre-kindergarten teachers. At both levels, more direct teacher intervention for instructional purposes seemed desirable. In general, the pre-kindergarten teachers appeared to be more spontaneous and more flexible in structuring the daily programs. However, some kindergarten teachers were also very responsive to the cues of children in developing their program. These teachers circulated freely among the children as they worked at different activities, offering guidance and suggestions. Other kindergarten teachers seemed to prefer a high degree of structure and were less flexible in adapting the program to the children's needs. It was apparent to the evaluators that the children were happier, more productive, and more verbal in the classrooms where the climate was fairly free, as it was in the pre-kindergartens. The change from one type of classroom climate to another is particularly critical for the child who has attended pre-kindergarten.

In contrast to the broader participation of the pre-kindergarten paraprofessionals in teaching, the role of the educational assistant in the kindergarten classes visited was generally limited to housekeeping chores, preparing materials, and disciplining the children. In only three classes did the educational assistant share the teaching role. In the evaluators' opinion, most of the assistants are capable of participating far more actively in the classroom program. Under the training and supervision of the classroom teacher, the educational assistant could be allowed to assume more teaching responsibilities, thus decreasing the pupil-teacher ratio and allowing for more of the small group and individual instruction that appears to be so effective in the pre-kindergartens.

As a number of kindergarten teachers noted on the open-ended section of their questionnaire, the excellent social welfare and clinical services provided at the pre-kindergarten level more or less terminate with that program. These services, extending as they do to family and community needs, appear to contribute substantially to the child's preparation for his early school years. While broad consideration of this matter is beyond the scope of this report, the evaluators suggest that failure to continue those services beyond the pre-kindergarten level may seriously weaken gains made. At the very least, records of the child's personal development and family history, including special services received at the pre-kindergarten level, should be forwarded to the kindergarten teacher. Additionally, parent-teacher communication and parental involvement should be developed further at the kindergarten level to maintain the excellent relations that have been established through the efforts of the pre-kindergarten staff.

Implementation of Evaluators' Previous Recommendations

Many of the recommendations that the evaluators had submitted in their 1967-68 report were implemented this year. There was evidence that the list of recommendations had been reviewed by members of the supervisory staff of the Bureau of Early Childhood Education, and that the supervisors had met with the classroom teachers in their districts to discuss ways of improving the pre-kindergartens. The subsequent efforts to put the plans into action were not always successful, but at least some of the recommendations were put into effect in each of the schools participating in the program.

Many changes for the better were seen by the evaluators' consultants, who were early-childhood specialists, during their visits to the schools. As mentioned earlier, only two of the schools that were in last year's observational sample were re-visited this year, but the sample groups of both years were selected so as to be representative of all the schools in the program.

Better balance between active and quieter experiences in the daily program was recommended by the evaluators last year. This balance had been achieved in the classrooms visited this year. Improvements in room arrangements were also noted. Books and phonograph records were more plentiful this year, although the quantities were still insufficient to meet the needs and desires of the children.

More adult-child interaction during free play was seen this year, than last year. This interaction helped to make the play period a valuable learning experience for the child, rather than letting it be a time for haphazard or incidental learning. Coordination between the teachers and the aides showed much improvement, which may account for the increased amount of attention given to the children.

It was recommended that training be given to the paraprofessionals before the beginning of the school year. This was not done, but training programs were initiated for them during the early months of 1969. Since teachers also attended these training sessions, which were held on a district-wide basis, a need mentioned by the evaluators in one of their recommendations last year was met to some extent.

Little progress had been made in providing facilities for storing out-of-door equipment, or in increasing the number of tricycles.

Room cleanup and garbage disposal after lunch had been improved. Although teachers were not present during the lunch period, the evaluators' suggestion that learning experiences be incorporated in that period was apparently being implemented by the aides this year. The aides called the children's attention to colors, textures, and mathematical concepts such as more or less and one-to-one relationships, which applied when the children were setting the tables.

Equipment and supplies were generally satisfactory this year, although no way has yet been found to have equipment repaired or supplies delivered more quickly.

The evaluators had recommended that a special section of the Pre-Kindergarten Guide be devoted to techniques in language development for children with foreign-language backgrounds. While this suggestion was not implemented, it was possible for the pre-kindergarten teachers to utilize the section on "Teaching English as a Second Language" of the "Handbook for Language Arts," which covers pre-kindergarten through Grade 2. This handbook is published by the Bureau of Curriculum of the Board of Education.

As emphasized in other parts of this report, children who are seriously deficient in English-language skills are still not benefitting fully from the program. In line with one of the recommendations made last year, Spanish-speaking aides apparently have been assigned to many classes that enroll children with Spanish-language backgrounds, but these children would be served better if both the teacher and the aide were bilingual.

In the main, efforts evidently had been made to follow the recommendations as far as practicable under existing conditions. Some of the changes were not effected early enough in the school year, however. The recommendations pertaining to higher standards for selecting rooms for pre-kindergartens and improvements in conditions in over-crowded buildings probably will not be realizable until the city's school construction projects are further advanced.

As indicated above, important changes have been accomplished in the areas of the recommendations relating to the daily classroom activities and the interaction among the teachers, children, and aides.

CHAPTER 12

INTERVIEWS WITH DISTRICT SUPERINTENDENTS

The evaluators interviewed six of the district superintendents whose schools are involved in the Pre-Kindergarten Program. These administrative officials were asked to express their opinions about the program, to indicate pertinent strong features, and to offer suggestions for improvement.

There was no division of opinion among the district superintendents regarding the value of this early-childhood training. Several were emphatic in stating that this addition to the elementary school program is undoubtedly the most important innovation for betterment that has been introduced in the city's elementary schools in many years.

The district superintendents expressed strong convictions about the beneficial influences of the program on the development of the young children's readiness for academic learning. Teachers in the kindergartens and primary grades evidently had been informing the administrators that the children who had been in the program showed more maturity than those who had not been exposed to this early training.

An important corollary finding, according to several of the superintendents, is the degree of social readiness observable in the pupils. Through this program, young children coming from environments providing limited experiences have made many salutary adjustments. They show a relatively high level of social development through their positive attitude toward the school and their good relationships with their classmates.

The district superintendents said that the Pre-Kindergarten Program has greatly stimulated parental interest and involvement in the school activities. Through the program, parents have been given opportunities to work in the classroom as paraprofessionals and to become active participants, on a voluntary basis, in the implementation of the curriculum.

The superintendents indicated that there is a definite need for on-going curriculum research to spur further development of the program. Fruitful research might well point the way toward new means of providing vital learning experiences for the children. It might also lead to the development of teaching appropriate to the maturation level and rate of growth of the children involved.

In addition, some of the superintendents stressed that the teacher-education program for early-childhood specialists should include an adequate number of courses related to the pre-kindergarten level. Such courses should be designed to enable the teacher to meet the varying experiential backgrounds and ability levels of young children.

It was the consensus of the superintendents that one very important way of improving this program would be to provide sufficient space to allow its present scope to be broadened to include the greatest possible number of children. To facilitate this, steps should be taken to further the development and implementation of plans to expand the number of early-childhood educational centers within the school system. The superintendents regard these centers as an important and integral part of the total educational plan.

All the district superintendents who were interviewed clearly indicated that they favored continuation of the Pre-Kindergarten Program.

CHAPTER 13

SUMMARY AND RECOMMENDATIONS

During the 1968-69 school year, the Pre-Kindergarten Program registered approximately 9,240 children in 188 schools in the five boroughs of New York City. It employed 401 teachers, who taught 616 classes. Most of the teachers had both an afternoon and morning class. Each class enrolled about 15 children, who attended daily three-hour sessions for the entire school year. Each of the teachers was assisted by a team of three paraprofessionals. Early childhood education supervisors, teams of speech teachers, and clinical teams also were assigned to the program.

Ten schools that were deemed to be representative of the program schools as a whole were chosen from high-density poverty areas for field observations and testing. Only two of the schools had been in last year's evaluation sample. The morning and afternoon classes of one pre-kindergarten teacher in each of these schools made up the sample group of 300 children.

The evaluation study was extended to the kindergarten level to determine whether children who had been in the Pre-Kindergarten Program last year differed from the others, and whether the kindergartens were building upon the training of the pre-kindergarten children. This study was based on one morning and one afternoon kindergarten class in each of ten schools from last year's sample. About 500 children were included in the 20 classes of these schools. Some of the classes consisted entirely of pupils from pre-kindergarten, some had none with that experience, and some were mixed.

Guidelines for the evaluation were prepared with the cooperation of the director of the Bureau of Early Childhood Education and members of her staff. Evaluators visited the sample classes in February and May, and on both occasions interviewed teachers and observed instruction. Data were also obtained through questionnaires sent to all pre-kindergarten teachers and paraprofessionals, and to the parents of the children in the sample classes. The questionnaires were essentially similar to those that had been developed for last year's evaluation.

In the kindergarten follow-up, teachers in the sample classes were interviewed during visits by the evaluators. A new questionnaire was developed and sent to all the kindergarten teachers in the Title I Pre-Kindergarten Program schools.

The New York Child Development Scales were used to evaluate the children's progress in the areas of personal independence, interpersonal relations, language skills, and muscular coordination. Special instruments were developed to evaluate the children's understanding of basic concepts, their fundamental knowledge and comprehension, self-image, and school attitudes. One of these instruments, the Pre-Kindergarten Inventory, was a refinement of that used in 1967-68. A similar inventory for use in the kindergartens was developed this year.

Pre-Kindergartens

Classroom and Facilities

The pre-kindergarten classrooms were bright and pleasant, with arrangements for separate areas for specific activities. Multi-ethnic pictures and examples of student work were displayed on bulletin boards attractively. Some of these boards should have been brought down to the children's eye level, however.

Materials and equipment were abundant, readily available, and generally in good condition. Every classroom had a woodwork bench, but only one was seen in use in February, and the others did not seem to have been used recently, since other materials were stored on them. Play with water, sand, or clay was observed in only four of the ten rooms visited. Seven, however, had live turtles, fish, or hamsters, and were growing some plants. More plants and pets were seen in the spring, by which time, too, some of the woodwork benches had been put to use.

The chief lacks in space and materials were in the supplies of blocks, playground space and playground equipment, cubbies for the children, tape recorders and earphones, and, in a few instances, toilets located within the classrooms so that the children would not have to be escorted to and from washrooms.

The Teachers

All 10 teachers in the sample classes appeared to be warmhearted, sincerely concerned about the young children, and enjoyably involved in their work. This was true of both the relatively new teachers and the "veterans." Five of the 10 had been teaching from 8 to 35 years, which was approximately the same proportion that held for the program as a whole.

More large-group teaching than is really desirable in pre-kindergarten was observed. Some teachers explained this on the grounds that time lost during the fall strike pressed them into crowding more into each day than was desirable.

Some teachers seemed to downgrade the role of guided play in the instructional process, but nearly all of them placed high value on verbal experiences for the children. Most of the teachers tried to develop the children's skills incidentally through techniques such as calling attention to the fact that records are round, using color names ("Children wearing red, please wash your hands"), or by having children count and serve cookies.

During the second series of evaluation visits in May, notable improvements in the effectiveness of teaching were observed. The teachers appeared to be making efforts to implement suggestions that had been offered in previous evaluation reports. During free play, several teachers moved from individuals to subgroups, raising questions, and enriching the quality of the children's activities.

Paraprofessionals

Respect and friendliness among the teachers and aides observed were evident in most rooms. Aides who had been in the classes since the program's inception helped with teaching functions, whereas in other classrooms the aides did only what might be called "cleanup work." Several aides who spoke Spanish well were helpful in arranging parents' meetings and making home visits. Teacher visits to the home also were found to be effective in furthering the goals of the program. In almost every class visited, the aides and teachers were working together more closely and effectively in the spring than in February, partly due to the training sessions that had been conducted for paraprofessionals, and also because the teachers and aides had been together longer by that time.

The training sessions were attended by both teachers and paraprofessionals. The nature of these sessions varied, and included topics ranging from curriculum content to planning for class trips. Practically all the teachers and their aides expressed enthusiasm for the training program. The paraprofessionals who returned questionnaires indicated that the sessions had generally been helpful in improving their understanding of their roles, in increasing the teachers' understanding of the aides' responsibilities, and in improving the cooperation between the teachers and paraprofessionals. The paraprofessionals also indicated that the training program had been "useful to some extent" in improving the pre-planning of daily classroom activities and lessons.

About one half of the teachers who answered questionnaires checked "effective" or "very effective" as their rating of the training program.

Work in the Classroom

In most of the classrooms visited, the teachers placed heavy emphasis on language-development games and on learning about colors and shapes. Most of the observers found that the classroom strategy stressed concept development, rather than rote learning. Attendance-taking was used to call the children's attention to the initial sounds of words and to give them experiences with numbers. The observers also saw a variety of art activities.

Problem solving was encouraged, especially during block play, and improvements were noted in the teachers' styles of questioning.

The Pre-Kindergarten Curriculum Guide

The Guide was generally found most useful by teachers who were new to the program. They were able to turn to it whenever they needed direction.

The Children

Girls and boys were about equal in number in the observed classes. Forty-nine per cent of the children were Negro, and 40% had Spanish-language backgrounds.

Procedures for selecting children for participation in the Pre-Kindergarten Program were rated as "satisfactory" or "very satisfactory" by 66% of the teachers who returned questionnaires. Almost one-half of these teachers indicated that the number of openings in existing classes was insufficient. Many of the paraprofessionals, as well as the teachers, proposed that the program be enlarged to accommodate more children. Some indicated that their communities very definitely needed more classes.

Program participation had definitely enhanced the development of the children, according to the evidence obtained from all the evaluation sources of this study. The evaluators noted that the children they observed had become more independent and outgoing during the interval between the first and final evaluation visits. In the spring, the children responded easily to simple directions; they washed their hands without being told to do so before the juice and lunch periods, and poured their own juice; they worked independently, respected each other, conversed with each other more, and expressed their own opinions.

The children in the evaluation sample performed quite well on the Pre-Kindergarten Inventory. The percentage equivalent of their average total score was 77, which was about the same as the average attained by last year's sample. They were most proficient on the sections that tested their ability to name or point to specified parts of the body and to understand basic concepts. Identification of geometrical forms was the most difficult part of the inventory for them.

The relatively poor performance of the Spanish-speaking children, which led to a lowering of the overall average score, was a corollary of their language handicap. Neither in the Pre-Kindergarten Program nor in the kindergartens had an effective attempt been made to teach these children English or to place truly bilingual teachers or paraprofessionals in the classrooms.

On the average, girls performed better than boys did on all the cognitive sections of the inventory except science.

Especially evident to the evaluators were the teachers' efforts to develop pride in cultural heritage, demonstrated by pictorial displays and story material pertinent to Negro and Puerto Rican children. The results of the Self-Image section of the Pre-Kindergarten Inventory indicated that most of the children had developed a positive or neutral attitude toward school, and viewed themselves in a favorable light.

On the New York Child Development Scales, the children in the sample classes, as a group, were rated between "average" and "above average"--most favorably in their motor development, and least favorably in their language skills, with personal independence and interpersonal relations in-between.

As a result of sustained encouragement on the part of the teachers and paraprofessionals, parents took an active interest in the program and became involved in it.

The accomplishments of the program were praised emphatically by the six district superintendents who were interviewed. Several said that it was the most important innovation for betterment that had been introduced in the city's elementary schools in many years.

Kindergarten Follow-Up

Classroom and Facilities

Most of the kindergarten classrooms visited were bright in appearance and cheerfully decorated, featuring both educational displays and examples of the children's work. The layouts of the rooms were basically similar to those of the pre-kindergartens, but materials were less abundant, and special-purpose areas were not so clearly delineated. This disparity in materials and clarity of room arrangement might have been an initial source of confusion and frustration for the children who had attended pre-kindergarten the year before.

The Teachers

The teaching styles of the kindergarten teachers were quite diverse. While practically all of the pre-kindergarten teachers who had been observed were judged to be responsive to children's cues and flexible in their instructional methods, some of the kindergarten teachers showed a preference for considerable structure in their daily routines. In the evaluators' opinion, the children benefitted more when they were in a freer classroom climate, comparable to that of most of the pre-kindergartens.

Paraprofessionals

Few of the classroom assistants took part in the instructional process in the kindergartens, according to the information that the evaluators obtained. Because these assistants had not been trained to participate extensively in teaching activities, they did not realize their potential for giving instructional help to individuals and small groups.

Work in the Classroom

The kindergarten curriculum coverage was essentially similar to that of the Pre-Kindergarten Program, with emphasis being directed toward areas such as colors, shapes and mathematical concepts, and introductory science. Since articulation of the pre-kindergarten and kindergarten curricula was weak, however, the children who had been in the Pre-Kindergarten Program did not seem to have adequate opportunities to build upon their previous learning accomplishments. This was especially apparent in classes where the children who had been in the program were outnumbered by others who had not. Furthermore, in the evaluators' judgment, children in classes composed entirely of those who had attended pre-kindergarten progressed more readily than those where the pupils were grouped with even a minority who lacked this experience.

The Children

About 65% of the children in the observed kindergarten classes were Negro, and approximately 29% were Spanish-speaking. One-fourth of these classes were composed almost entirely of children who had attended pre-kindergarten, and another fourth had almost no children who had had this exposure. The other classes were mixed in respect to the prior experience of the children.

The results of the Kindergarten Inventory pointed up the effectiveness of the Pre-Kindergarten Program in developing the knowledge and learning ability of poverty-area children. The kindergarten children who had attended pre-kindergarten knew colors, geometric shapes, rudimentary mathematical principles, and introductory science better than did those who had not attended pre-kindergarten. In each of the curriculum areas tested, the children with the pre-kindergarten background surpassed the other children in average score.

Teachers' ratings on the New York Child Development Scales were consistently more favorable for the pre-kindergarten-trained children, as a group, than for the others who had not had the benefits of that training.

The above findings apply to the children who were well versed in English. All the data collected by the evaluators pointed to the failure of the program to deal as effectively with children from Spanish-language backgrounds.

On the basis of the findings of this study and other considerations, the evaluators offer the following suggestions and recommendations for improving the Pre-Kindergarten Program:

A. Program and Facilities

1. Every classroom should be provided with essential materials such as blocks, cubbies, and appropriate audiovisual equipment. (Basic audiovisual equipment includes tape recorders and phonographs with earphones, and cameras.)
2. Additional books and phonograph records of good quality should be supplied.
3. Classroom supplies should be delivered early in the year, and procedures for ordering equipment should be kept simple and flexible. Additional provisions for petty cash purchases would allow teachers to enhance the many incidental activities of the pre-kindergarten classroom.
4. Adequate playground facilities, especially equipped for small children and separated from the area used by the older pupils, need to be provided for some schools. Additional mobile equipment of various types and suitable storage space for it on the playgrounds are also needed for most of the schools.
5. During inclement weather, an indoor play area would be advantageous for large-muscle activities and for release of energies.
6. More appealing and better-balanced lunches, featuring a wider variety of foods from day to day, should be provided. More consultation with teachers and parents in preparing menus is advisable so that meals may be made more appealing to the children's tastes, as influenced by their cultural backgrounds.
7. Lunchtime opportunities for informal learning should be thoroughly explained to the paraprofessionals. If teachers cannot be present during this period regularly, they should at least supervise it from time to time and make sure that their aides know how to use it for educational purposes.
8. Staff conferences should be held regularly and frequently so that team roles and specific responsibilities may be clearly understood.
9. Bulletin board displays should be placed at the children's eye level.

10. A more effective program of instruction should be instituted for the children who come from the large Spanish-speaking community of New York City. Serious consideration should be given to providing special instruction for these children to help them develop English language skills. The current practice of assigning them to classes where many of the other children converse in English is commendable, but special instruction is also needed.
11. Bilingual teachers and aides should be assigned to classes in Spanish-speaking communities and in other locations where English is the second language.
12. Since the findings cited in the cognitive section of this report seem to indicate that the children were not as strong in mathematics and science as they were in the other curriculum areas measured, special consideration might be given to strengthening instruction in these two areas.

B. Teachers and Paraprofessionals

1. Staff roles and responsibilities need further clarification.
2. Training sessions for paraprofessionals should begin earlier in the year, and should be continued on a more regular basis.
3. Serious consideration should be given to possibilities of career advancement for paraprofessionals, based on the fulfillment of educational requirements, by establishing a program comparable to "The Career Ladder," and administered by the Bureau of Early Childhood Education.
4. Teachers should participate in the selection of their aides.
5. The organization of the program might be improved if the staff members could meet early in the year, preferably a week prior to the formal commencement of the program, to become acquainted with each other and to plan activities and schedules.
6. Brief orientation visits should be scheduled for the children and their parents before the first day of school.
7. Teacher workshops should be conducted on TESL (Teaching English as a Second Language), and on woodworking, block-building, clay-manipulation and other activities involving pliable materials.
8. The importance of small-group and individualized instruction for young children should be emphasized during in-service discussions.

C. Parents

New methods for stimulating parent participation are needed, since increased parental involvement would probably strengthen the program. Family workers and teachers should meet more often with parents to make plans jointly and to discuss the activities and goals of the program.

D. Kindergarten Sequel

Better articulation of the Pre-Kindergarten and the Kindergarten Programs is recommended. The kindergarten sequel might be improved by the following means:

1. Equip the kindergarten classrooms with materials more closely related to those of the pre-kindergartens to enable the children to build more directly on their previous experiences.
2. Involve the educational assistants more effectively in the kindergarten instructional process to increase the amount of guidance affordable to the individual children.
3. Improve the articulation of the kindergarten and pre-kindergarten curricula to strengthen the continuity of the children's learning experiences. A series of teacher workshops at the school and district levels might well be directed toward this goal.
4. When school conditions permit, group together the kindergarten children who have the Pre-Kindergarten Program background.
5. Extend the social services offered at the pre-kindergarten level to make them available to the families of kindergarten children, and increase the efforts to maintain parental interest and involvement in school activities.
6. Conduct workshops on Teaching English as a Second Language for kindergarten teachers.

In the evaluators' opinion, the Pre-Kindergarten Program should be continued, and enrollment opportunities should be extended to all children living in poverty areas of the city.

APPENDIX A

Statistical Tables

TABLE 29

Percentages of Correct Responses on Individual Items of the Pre-Kindergarten Inventory
(N=204)

Items	Per Cent
Introductory Section	
Name	99
Age	78
Birthday	25
Day of Week	16
Body Parts	
Naming	
Nose	97
Foot	84
Ears	92
Finger	82
Leg	68
Head	92
Naming or Pointing	
Nose	98
Foot	93
Ears	99
Finger	99
Leg	93
Head	100
Colors	
Naming	
Red	78
Yellow	77
Green	67
Blue	72
White	74
Black	74
Naming or Pointing	
Red	84
Yellow	84
Green	82
Blue	85
White	82
Black	88
Basic Concepts	
Open	99
Softest	60
Off	96
Inside	80
Over	82
Hottest	82
Behind	70
Closed	98
Hardest	79
On	99
Outside	70
Under	89
Coldest	82
In Front of	80
Shapes	
Naming	
Circle	82
Square	44
Rectangle	45
Naming or Pointing	
Circle	91
Square	63
Rectangle	74
Mathematics	
3	91
2	94
4	82
1	98
5	76
First	41
Middle	44
Last	21
Biggest	98
Smallest	60
Science	
Rainy	95
Snowy	83
Windy	56
Sunny	84
Wheels	96
Magnets	31

TABLE 30

Percentages of Correct Responses on Individual Items of the Kindergarten Inventory

Items	Pre-Kindergarten Experience (N=117)	No Pre-Kindergarten Experience (N=114)
Introductory Section		
Name	97	93
Age	90	81
Birthday (month only)	13	12
Birthday (month and day)	27	24
Month	21	17
Day of Week	24	33
Days of Week (all in order)	38	27
Days of Week (all,but not in order)	15	9
Right Hand	80	71
Left Leg	75	66
Left Hand	51	49
Right Leg	74	66
Body Parts		
Naming		
Foot	91	90
Ear	98	96
Chin	93	81
Finger	92	91
Knee	72	61
Naming or Pointing		
Foot	99	96
Ear	100	100
Chin	96	96
Finger	98	100
Knee	93	88
Colors		
Naming		
Red	97	85
Yellow	94	83
Orange	91	79
Green	87	79
Blue	94	83
White	94	89
Black	93	90
Naming or Pointing		
Red	98	91
Yellow	97	89
Orange	99	89
Green	93	83
Blue	97	90
White	98	91
Black	97	95

TABLE 30 (Cont'd.)

Percentages of Correct Responses on Individual Items
of the Kindergarten Inventory

Items	Pre-Kindergarten Experience (N=117)	No Pre-Kindergarten Experience (N=114)
Shades		
Darker (black-gray)	88	89
Lighter (blue)	82	75
Darker (green)	85	95
Basic Concepts		
Over	87	87
Inside	91	90
Behind	74	63
Closest	99	97
Most	89	89
Widest	83	82
Under	93	95
Outside	85	76
In Front Of	90	82
Furthest	29	24
Fewest	9	17
Narrowest	41	39
Shapes		
Naming		
Circle	91	83
Square	72	52
Triangle	72	47
Rectangle	27	13
Naming or Pointing		
Circle	99	96
Square	84	65
Triangle	85	76
Rectangle	69	49
Same-Different		
Same (dinosaur)	99	98
Different (balloon)	67	59
Same (ring)	67	97
Mathematics		
Biggest	99	100
Smallest	72	69
Last	55	58
Middle	68	63
First	49	44
9	90	82
2	99	100
6	98	87
0	99	100
5	99	98
6	95	87
3	99	93
10	88	82

TABLE 30 (Cont'd.)

Percentages of Correct Responses on Individual Items of the Kindergarten Inventory

Items	Pre-Kindergarten Experience (N=117)	No Pre-Kindergarten Experience (N=114)
Pre-Reading		
g	100	99
n	91	88
as	99	99
us	91	82
may	72	73
dog	68	68
call	84	81
stop	72	72
Science		
Rainy	96	95
Windy	72	73
Snowy	80	83
Sunny	96	87
Warm Out	67	62
Cold Out	36	30
Flag in Wind	81	80
All Wheels	98	94
Shape of Wheels	77	55
Bicycle	71	60
Magnet	59	53

TABLE 31

Class Means on Pre-Kindergarten Inventory (Raw Scores)
(N=204)

School	Class	N	Body Parts	Colors	Basic Concepts	Shapes	Mathe-matics	Science	Total Score
A	1	9	10.4	7.7	11.6	3.1	7.3	7.3	49.0
	2	6	9.3	7.3	10.5	3.0	5.5	6.5	43.5
B	3	10	10.4	10.5	11.4	3.0	7.3	6.5	51.4
	4	10	11.1	8.3	10.9	3.8	6.6	6.6	49.4
C	5	10	11.6	10.9	11.5	4.1	7.2	6.0	54.1
	6	11	11.6	7.8	11.7	4.1	7.3	6.8	52.2
D	7	8	10.3	8.4	11.0	3.0	7.3	6.1	48.0
	8	9	9.6	8.3	10.4	4.1	6.6	5.0	45.9
E	9	13	11.2	9.3	12.3	5.2	7.6	6.9	54.5
	10	7	10.1	9.9	12.1	5.1	7.1	5.8	52.3
F	11	13	11.4	8.9	11.6	4.3	7.3	6.8	52.2
	12	6	9.8	7.0	11.0	3.7	7.2	6.7	47.3
G	13	13	11.6	10.8	11.2	2.8	6.5	7.4	51.8
	14	11	11.9	10.4	12.6	2.4	7.0	7.7	54.4
H	15	13	11.6	11.2	12.5	4.9	7.5	7.8	58.0
	16	14	11.2	10.4	11.4	4.6	6.9	8.3	55.4
I	17	13	11.4	9.9	12.1	4.7	6.5	6.5	53.1
	18	12	11.8	10.8	12.9	4.9	7.2	7.7	57.8
J	19	7	8.7	8.3	11.4	3.0	7.9	7.9	49.3
	20	9	10.9	9.9	11.0	4.0	6.4	8.0	52.8
No. of Items			12	12	14	6	10	10	68
TOTAL		204	11.0	9.5	11.7	4.0	7.0	7.0	52.3

TABLE 32

Percentage Distribution of Responses to Items in Teacher's Questionnaire (N=173*)

	Response Choice				
Item	1	2	3	4	5
1	1	99			
2	32	13	29	22	4
3	23	25	19	9	22
	1	2	3	4	5
4	26	10	2	2	3
	6	7	8	9	
	18	5	4	8	
	1	2	3	4	5
5	65	34	2		
6	9	12	67	3	8
7	4	6	52	12	24
8	21	8	60	3	8
9	1	9	42	16	32
10	1	20	57	10	10
11	0	6	79	1	14
12	0	4	36	19	41
13	0	5	58	8	27
14	11	1	21	28	38
15	30	12	24	16	18
16	16	2	15	30	36
17	2	10	56	11	21
18	38	1	48	2	10
19	17	5	62	6	9
20	2	1	30	18	48
21	28	3	65	1	2
22	13	3	80	1	2
23	43	43	12		
24	6	41	52		
25	6	61	31		
26	33	39	25	2	
27	3	30	37	28	
28	6	2	92		
29	76	22			
30	8	51	5	21	12
31	12	48	9	20	9
32	8	4	10	36	40
33	0	1	2	31	65
34	1	4	6	32	56
35	0	0	0	6	93
36	10	14	6	43	25
37	10	33	4	27	24
38	21	14	18	40	8
39	3	1	9	55	32
40	9	7	83		
41	32	65	1	1	
42	4	61	35	1	
43	1	18	81	1	
44	1	78	17	4	

	Response Choice				
Item	1	2	3	4	5
45	2	73	16	7	
46	0	90	8	1	
47	13	82	4	1	
48	1	82	12	3	
49	4	87	6	1	
50	26	68	4	0	
51	0	82	16	1	
52	1	4	0	30	66
53	8	39	6	47	
54	13	3	17	55	11
55	1	0	1	10	87
56	0	0	0	12	86
57	2	0	1	30	65
58	1	1	1	32	64
59	2	0	2	30	65
60	0	0	1	28	69
61	0	1	2	43	53
62	4	1	8	53	32
63	0	2	2	28	67
64	2	0	2	31	63
65	2	2	8	46	40
66	0	1	1	18	79
67	4	1	13	49	31
68	0	1	2	28	67
69	0	0	16	81	1
70	0	0	14	83	2
71	1	0	3	91	3
72	0	1	13	82	2
73	1	0	13	83	1
74	0	0	8	88	3
75	0	2	46	49	4
76	0	4	56	37	1
77	0	1	18	76	4
78	1	1	35	59	2
79	0	9	56	32	1
80	0	0	7	88	3
81	0	4	31	61	2
82	0	0	3	92	3
83	1	33	53	11	
84	1	59	36	2	
85	5	63	27	4	
86	2	51	40	5	
87	1	38	49	12	
88	1	33	52	12	
89	1	0	10	86	
90	1	0	3	94	
91	1	0	11	86	
92	2	1	33	61	

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* Some respondents did not answer some of the items.

TABLE 33

Percentage Distribution of Responses to Items in Kindergarten Teacher Questionnaire (N=319*)

	Response Choice				
Item	1	2	3	4	5
1	1	100			
2	24	14	15	8	37
3	23	19	19	11	28
4	10	14	7	0	2
	6	7	8	9	
	36	8	0	19	
	1	2	3	4	5
5	67	31	0	2	
6	4	51	37		
7	4	56	38		
8	2	53	43		
9	3	69	26		
10	2	40	56		
11	6	31	61		
12	6	57	35		
13	1	19	78		
14	1	33	64		
15	3	63	32		
16	6	59	33		
17	3	46	50		
18	5	39	54		
19	10	57	32		
20	3	46	50		
21	2	71	25		
22	2	57	40		
23	3	50	46		
24	1	50	48		
25	1	61	37		
26	2	31	64		
27	2	38	58		
28	3	35	60		
29	2	55	42		
30	2	39	57		
31	2	32	64		
32	0	61	37		
33	1	51	47		
34	2	31	66		
35	2	44	47		
36	49	45	4		
37	37	56	5		
38	36	56	6		

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* Some respondents did not answer some of the items.

TABLE 34

Percentage Distribution of Responses to Items in Teacher Aide, Family Worker and Family Assistant Questionnaire (N=419*)

	Response Choice					
Item	1	2	3	4	5	6
1	1	99				
2	40	38	22			
3	0	1	10	38	48	2
4	2	64	33			
5	29	19	22	20	8	
6	1	84	4	0		
7	1	78	4	1		
8	1	83	2	0		
9	0	86	4	0		
10	5	82	2	0		
11	1	86	2	0		
12	5	81	2	0		
13	23	53	22			
14	5	2	87	1	3	
15	0	3	86	0	9	
16	1	2	89	1	5	
17	0	2	94	0	2	
18	21	1	29	5	34	
19	3	3	82	0	10	
20	2	1	89	0	6	
21	7	1	52	0	32	
22	1	2	90	0	5	
23	18	2	42	3	26	
24	5	2	62	3	26	
25	22	0	52	1	13	
26	19	0	46	1	15	
27	8	1	66	1	17	
28						
29	0	1	91	3	3	
30	4	3	65	0	26	
31	26	0	33	1	24	
32	11	1	48	1	31	
33	5	4	80	1	8	
34	30	0	22	4	27	
35	4	3	89	0	2	
36	4	1	66	0	20	
37	4	0	50	3	41	
38	0	1	89	0	8	
39						
40	4	3	59	4	23	
41	0	2	83	1	11	
42	1	4	92	0	1	
43	21	1	42	1	26	
44	4	3	80	1	10	
45	0	1	90	0	7	
46	20	0	45	1	21	
47	27	0	34	0	26	
48	14	0	58	2	19	
49	12	1	63	0	17	
50	3	2	84	0	9	
51	10	17	50	5	6	
52	3	1	71	1	22	
53	9	0	60	0	21	
54	2	0	88	0	8	
55						
56	1	0	2	11	84	
57	2	0	1	18	77	
58	2	0	2	23	71	
59	3	0	3	20	72	
60	2	1	1	14	80	
61	3	3	3	26	63	
62	4	4	4	30	56	
63	9	4	4	36	45	
64	1	1	2	27	66	
65	6	7	20	45		
66	1	1	10	66		
67	0	2	6	72		
68	2	1	9	66		
69	2	3	15	59		

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* Some respondents did not answer some of the items.

TABLE 35

Percentage Distribution of Responses to Items
in Parent's Form
(N=191*)

	Response Choice					
Item	1	2	3	4	5	6
1	80	19	1			
2	84	14	1			
3	84	11	1			
4	74	20	3			
5	88	10	0			
6	74	20	4			
7	79	21	0			
8	54	39	3			
9	65	32	1			
10	72	27	1			
11	82	17	2			
12	94	4	1			
13	98	1	2			
14	46	23	29	3		
15	55	40	4			
16	40	54	3			
17	7	76	7	6	2	
18	78	4	12	5		
19	50	35	12	1	1	0
20	28	29	17	8	9	7
21	91	5	2	2		

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* Some respondents did not answer some of the items.

APPENDIX B

Teacher's Questionnaire

Kindergarten Teacher Questionnaire

Teacher Aide, Family Worker, and Family Assistant Questionnaire

Parent's Form

The Psychological Corporation
304 East 45th Street
New York, N. Y. 10017

TEACHER'S QUESTIONNAIRE

Pre-Kindergarten
Program

The Psychological Corporation is responsible for the evaluation of the Pre-Kindergarten Program. Your responses to this questionnaire are needed for this evaluation study. Full consideration will be given to your answers in making recommendations for modifications and improvements in this program.

YOUR NAME______________________________

SCHOOL______________________________

SECTION I - Background

1. Sex   1__Male   2__Female

2. Including this year, how many years have you been teaching in this Pre-Kindergarten Program?

1__One
2__Two
3__Three
4__Four
5__Five or more

3. Including this year, how many years have you been teaching?

1__Two or less
2__Three to four
3__Five to seven
4__Eight to ten
5__Over ten

4. What other grades have you previously taught?

1__Kindergarten
2__1st grade
3__2nd grade
4__3rd grade
5__Above 3rd grade

5. What is the highest level of education you have attained?

1__Bachelor's
2__Master's
3__Doctoral Degree
4__Other (Specify)____________________
____

SECTION II - Facilities and Services

(ITEMS 6 to 22)
Below is a list of equipment that should be available to your Pre-K classes. Please rate the QUANTITY and the QUALITY of each in your classroom. Use the following code:

1 = Not available
2 = Sufficient quantity but low quality
3 = Sufficient quantity and high quality
4 = Insufficient quantity and low quality
5 = Insufficient quantity but high quality

6.__Work benches
7.__Storage units
8.__Cubbies
9.__Library books
10.__Dolls
11.__Blocks
12.__Toys
13.__Art supplies
14.__Science materials
15.__Playground facilities
16.__Records

17.__Rhythm instruments

18.__Tape recorder and ear-phones

19.__Miniature household furniture

20.__Manipulative games

21.__Bathroom in room

22.__Sink with counter

23. Have you had any problems with the servicing of equipment?

1__No problems
2__Slight problems
3__Severe problems

In assessing the lunch program, would you say that:

24. Foods are varied and appetizing?

1__No opinion
2__Yes
3__No

25. A balanced diet is planned?

1__No opinion
2__Yes
3__No

26. To what extent do you need specific curriculum suggestions in developing your daily program?

1__No need
2__Slight need
3__Moderate need
4__Great need

27. How helpful have you found the Pre-Kindertarten Curriculum Guide as a source of curriculum suggestions?

1__Not at all helpful
2__Somewhat helpful
3__Moderately helpful
4__Very helpful

28. Do you think the curriculum for kindergarten and 1st grade should reflect the curriculum followed in pre-kindergarten?

1__No opinion
2__No
3__Yes

29. Which grouping arrangement for kindergarten classes do you think will enable the children to benefit most from their Pre-K training?

1__Classes composed entirely of children who attended pre-kindergarten
2__Classes with a mixture of children who did and did not have pre-kindergarten experience

(ITEMS 30 to 37)
Below is a list of supportive personnel available to the Pre-K Program. Indicate how useful each has been in the program. Use the following code:

1 = No opinion
2 = Not available
3 = Not useful
4 = Somewhat useful
5 = Very useful

30.__Social workers

31.__Psychologists and psychiatrists

32.__Early childhood supervisors

33.__Family workers

34.__Family assistants

35.__Teacher aides

36.__Medical personnel

37.__Dental personnel

38. In your opinion, how effective has the in-service training program been for paraprofessionals?

1__No opinion
2__Very ineffective
3__Ineffective
4__Effective
5__Very effective

39. How would you rate the quality of the classroom help you currently receive from family workers, family assistants, and teacher aides?

1__Have no help
2__Very low quality
3__Low quality
4__High quality
5__Very high quality

40. Do you think the training program for paraprofessionals should be expanded and improved?

1__No opinion
2__No
3__Yes

41. Do you feel that you have appropriate involvement in the selection of paraprofessional help?

1__Yes
2__No, I would like more involvement
3__No, I would like less involvement
4__I have no paraprofessional help

42. To what extent have parents been involved in your program?

1__Not at all
2__Somewhat
3__To a great extent
4__Don't know

43. How important do you feel parent involvement is for the pre-kindergarten program?

1__Unimportant
2__Slightly important
3__Moderately important
4__Extremely important
5__No opinion

(ITEMS 44 to 51)
Below is a list of different people associated with the Pre-K Program. Show whether you have had problems with any of them during your participation in the program. Use the following code:

1 = Do not deal with them
2 = No problems
3 = Slight problems
4 = Serious problems

44.__Family workers

45.__Family assistants

46.__Teacher aide

47.__District supervisor

48.__School principals or asst. principals

49.__Other teachers

50.__Other support personnel (i.e., social workers)

51.__Parents

SECTION III - Students

52. How effective has the Pre-K Program been in orienting the children toward school and school work?

1__No opinion
2__Very ineffective
3__Ineffective
4__Effective
5__Very effective

53. In your opinion, does your school have an appropriate amount of Pre-K classes for the number of children to be served in your community?

1__Don't know
2__Yes
3__No, there are more openings in the program than available children
4__No, there are fewer openings in the program than available children

54. How satisfactory is the current method of selecting children for participation in the Pre-K Program?

1__No opinion
2__Very unsatisfactory
3__Unsatisfactory
4__Satisfactory
5__Very satisfactory

(ITEMS 55 to 68)
Your pupils may have improved in many ways as a result of their participation in the Pre-K Program. Show how much improvement you feel your overall pupil group has made in each of the areas listed below. Use the following code:

1 = Can't rate this
2 = Very little improvement
3 = Little improvement
4 = Some improvement
5 = A great deal of improvement

55.__Adapting to the classroom situation
56.__Socializing with classmates
57.__Development of self-identity
58.__Level of interest or attention
59.__Exploratory activities
60.__Language skills
61.__Comprehending and using mathematical concepts
62.__Science
63.__Social concepts and practices
64.__Performance skills
65.__Caring for clothing
66.__Increasing level of awareness
67.__Paying attention to health care
68.__Listening skills

(ITEMS 69 to 82)
Indicate the degree of importance you place on each of the following areas of child development in the Pre-K Program. Use the following code:

1 = Don't know
2 = Little importance
3 = Moderate importance
4 = Great importance

69.__Adapting to the classroom situation
70.__Socializing with classmates
71.__Development of self-identity
72.__Level of interest or attention
73.__Exploratory activities
74.__Language skills
75.__Comprehending and using mathematical concepts
76.__Science
77.__Social concepts and practices
78.__Performance skills
79.__Caring for clothing
80.__Increasing level of awareness
81.__Paying attention to health care
82.__Listening skills

(ITEMS 83 to 88)
Below is a list of problems you may hav had with your Pre-K pupils. Show how serious each of the problems has been in your average Pre-K class. Use the following code:

1 = Can't rate this
2 = No problem
3 = A slight problem
4 = A serious problem

83.__Attendance
84.__Discipline
85.__Pupil abilities
86.__Pupil comprehension
87.__Language barriers
88.__Emotional or psychological problem

SECTION IV - Objectives

(ITEMS 89 to 92)
Below is a list of the objectives of the Pre-K Program. In your opinion, how well has each objective been met by the actual program operation? Use the following code:

1 = Don't know
2 = Not at all
3 = Only slightly
4 = To a great extent

89.__To improve the children's classroom performance
90.__To improve the children's social and emotional development and school attitude
91.__To improve the children's self-image
92.__To improve parent-school relationships and parent involvement

The Psychological Corporation
304 East 45th Street
New York, N. Y. 10017

KINDERGARTEN TEACHER QUESTIONNAIRE

Pre-Kindergarten
Program

The Psychological Corporation has been asked to evaluate the Pre-Kindergarten Program. As part of this evaluation, we plan to compare kindergarten children who have been in the Pre-Kindergarten Program with those who have not. Your responses to this questionnaire will help us to assess the relative performance of these two groups of children. Thank you for your cooperation in this effort.

YOUR NAME________________________________

SCHOOL___________________________________

SECTION I - Background

1. Sex 1___Male 2___Female

2. Including this year, how many years have you been teaching kindergarten?

   1___One
   2___Two
   3___Three
   4___Four
   5___Five or more

3. Including this year, how many years have you been teaching in all?

   1___Two or less
   2___Three to four
   3___Five to seven
   4___Eight to ten
   5___Over ten

4. What other levels have you previously taught?

   1___Pre-kindergarten
   2___1st grade
   3___2nd grade
   4___3rd grade
   5___Above 3rd grade
   6___None other than kindergarten

5. What is the highest level of education you have attained?

   1___Bachelor's degree
   2___Master's degree
   3___Doctoral degree
   4___Other (specify)____________
   ____

In the following sections, please base your answers on your recent kindergarten teaching experience. The term "pre-kindergarten," as used below, applies specifically to the New York City Pre-Kindergarten Program--not to pre-school programs in general.

SECTION II--Comparative Behavior Ratings

Please give your ratings of typical kindergarten children who have had Pre-Kindergarten Program training, using typical kindergarten children who have not had that training as the basis for comparison. Indicate your ratings by check marks.

	Worse	About the Same	Better
6. Cooperation with classmates			
7. Attitude toward teacher and other adults			
8. Ability to establish stable friendships with classmates			
9. Sensitivity to feelings and needs of others			
10. Ability to take leadership role			
11. Participation in routines as a member of the class			
12. Use of socially acceptable means of gaining recognition			
13. Ability to accept separation from parent or guardian			
14. Readiness for new experiences			
15. Enjoyment of school activities			
16. Respect for classroom materials and equipment			
17. Inventiveness in the use of materials			
18. Attention span			
19. Ability to control impulses during restrictive periods			

	Worse	About the Same	Better
20. Ability to persist in an activity or task toward a definite goal			
21. Pride in product of activities			
22. Desire to learn new subject matter			
23. Curiosity, leading to exploring classroom materials and equipment			
24. Ability to use general knowledge in play activities			
25. Enjoyment of self-expression through the arts			
26. Clarity of expression			
27. Ability to use words meaningfully			
28. Ability to follow directions and understand others			
29. Enjoyment in the use of language			
30. Fluency of speech			
31. Size of vocabulary			
32. Self-health care (grooming, washing hands, before snacks)			
33. Skill in use of large muscles (walking, skipping, dancing, throwing and catching, balancing, etc.)			
34. Small-muscle coordination (manipulating scissors, zippers, buttons, paint brushes, puzzles, etc.)			
35. Interest in books			

Please indicate your ratings of the parents of the children who had pre-kindergarten training, using the parents of the other children as the basis for comparison. Check the approximate boxes to show your ratings.

	More	About the Same	Less
36. Interest in child's school achievements			
37. Readiness to volunteer their assistance			
38. Attendance at parents' meetings			

39. Please give us any suggestions or recommendations you may have to offer for improving the Pre-Kindergarten Program.

The Psychological Corporation
304 East 45th Street

Teacher Aide, Family Worker and Family Assistant Questionnaire

Pre-Kindergarten
Classes Program

The Psychological Corporation is responsible for the evaluation of the Pre-kindergarten Classes Program. Your responses to this questionnaire are needed for this evaluation study. Full consideration will be given to your answers in making recommendations for modifications and improvements in this program.

YOUR NAME______________________________

YOUR SCHOOL____________________________

---

1. Sex 1__Male 2__Female

2. Which category best describes your current position in the Pre-K Program?

1__Teacher Aide
2__Family Worker
3__Family Assistant

3. What is your highest level of education?

1__No formal schooling
2__First through sixth grades
3__Seventh through eighth grades
4__Attended high school
5__Graduated high school
6__Other__________________

4. Which one category best describes the type of work you did before you joined the Pre-K Program?

1__Unemployed
2__Housewife
3__Other__________________

5. Including this year, how many years have you been working in the Pre-K Program?

1__One
2__Two
3__Three
4__Four
5__Five or more

(ITEMS 6 to 12)
Below is a list of different people sometimes associated with the Pre-K Program. Please indicate whether you have had problems with any of them during your participation in the Program. Use the following code:

1 = Don't deal with or not applicable

2 = No problems

3 = Slight problems

4 = Serious problems

6.___Family workers

7.___Family assistants

8.___Teacher aides

9.___Pre-K teachers

10.___Other teachers

11.___Other Pre-K staff members

12.___Outside groups such as social workers or psychologists

13. Do you feel that you could handle more duties than you are presently assigned?

1__Yes
2__No
3__Not sure

(ITEMS 14 to 54)

Below are listed various activities which could be performed by: I)Teacher Aides, II) Family Assistants and III) Family Workers. Show HOW OFTEN during a normal week you do each activity AND how USEFUL you feel the activity is. Use the following code:

1 = Never do this
2 = Do this often but feel it is not useful
3 = Do this often and feel it is useful
4 = Do this very little and feel it is not useful
5 = Do this very little and feel it is useful

(I)
TO BE ANSWERED ONLY BY:
TEACHER AIDES

14.__Helping with supplies and materials and equipment
15.__Helping children with clothing and personal needs
16.__Preparing the room for activities
17.__Assisting with lunches and clean-up
18.__Performing escort services
19.__Helping with outdoor play
20.__Accompanying children on trips
21.__Reading or telling a story
22.__Talking and listening to children
23.__Caring for brothers and sisters while parents meet with teachers or others
24.__Mounting pictures and assisting with bulletin boards
25.__Using special language skills with children
26.__Using special talents
27.__Meeting with teacher about daily plans
28.__Other____________________

____

(NOW GO TO PAGE 3)

(II)
TO BE ANSWERED ONLY BY:
FAMILY ASSISTANTS

29.__Visiting homes
30.__Contacting public agencies
31.__Consulting with the social work aide
32.__Consulting with the social worker
33.__Consulting with the other paraprofessionals
34.__Consulting with the psychologist
35.__Consulting with the teachers
36.__Compiling list of agencies that might be helpful to parents or the school
37.__Assisting in the classroom
38.__Attending meetings with parents
39.__Other____________________

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(NOW GO TO PAGE 3)

(III)
TO BE ANSWERED ONLY BY:
FAMILY WORKERS

40.__Providing escort services for children
41.__Assisting with trips
42.__Assisting with lunches
43.__Accompanying parents and children to visit private and public agencies
44.__Visiting homes
45.__Meeting parents
46.__Identifying special needs for referral to the social worker
47.__Conferring with the social worker
48.__Assisting in registration of Pre-K children
49.__Recruiting children for the Pre-K Program
50.__Following up absences
51.__Keeping a log of activities
52.__Assisting in classroom when Teacher Aide is absent
53.__Conferring with the other paraprofessionals
54.__Conferring with the teacher
55.__Other____________________

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(NOW GO TO PAGE 3)

THESE QUESTIONS TO BE ANSWERED BY ALL RESPONDENTS

(ITEMS 56 to 64)
Below is a list of various areas in which Pre-Kindergarten students may have improved as a result of being in the Pre-Kindergarten Program. In your opinion, how do you feel the Pre-Kindergarten students in general have improved since entering the Program? Use the following code:

1 = Can't rate this
2 = Very little improvement
3 = Little improvement
4 = Some improvement
5 = Great improvement

56. __Getting used to the classroom situation
57. __Getting along with classmates
58. __Being more independent and outgoing
59. __Paying more attention or being more interested
60. __Exploring things around them
61. __Speaking skills
62. __Caring for their clothing
63. __Paying attention to their health
64. __Following directions

TO BE ANSWERED BY TEACHER AIDES, FAMILY WORKERS, AND FAMILY ASSISTANTS WHO HAVE WORKED IN THE PRE-KINDERGARTEN PROGRAM FOR ONE FULL SCHOOL YEAR OR MORE.

(ITEMS 65-69)
Below is a list of various areas that may have been affected by in-service training. Indicate the extent of improvement that the training program has contributed to each by placing an "X" in the appropriate box.

	(1) DON'T KNOW	(2) NOT AT ALL	(3) SLIGHTLY	(4) TO A GREAT EXTENT
65. Pre-planning of daily classroom activities and lessons				
66. Teacher-paraprofessional cooperation				
67. Your understanding of your responsibilities				
68. Teacher's understanding of your responsibilities				
69. Utilization of your special skills and talents				

The Psychological Corporation
304 East 45th Street
New York, N. Y. 10017

PARENT'S FORM

PRE-KINDERGARTEN
CLASSES PROGRAM

THIS FORM IS TO BE ANSWERED BY THE MOTHERS OF PRE-KINDERGARTEN CHILDREN--OR FATHERS OR GUARDIANS IF MOTHER IS NOT AVAILABLE.

The Psychological Corporation has been asked to study New York City's Pre-Kindergarten Program. We would like your help. Your answers to the questions below may lead to the improvement of the program.

We would like to have your name, but we will not use your name in any way in connection with your answers. Please answer all questions. When you have finished this form, please give it to the teacher.

YOUR NAME: ______________________________

(ITEMS 1 to 11)
This first part has two lists of things that your child in the Pre-Kindergarten Program may do differently since being in school.

For items 1-6 mark an "X" in the box that shows whether your child does this MORE, the SAME, or LESS since being in the Program.

	(1) DOES MORE	(2) DOES THE SAME	(3) DOES LESS
1. Being happy			
2. Seeming to be more alert			
3. Asking questions			
4. Looking at magazines or books			
5. Speaking			
6. Exploring things more around the house			

For items 7-11 mark an "X" in the box to show whether your child does this BETTER, the SAME, or WORSE since being in school.

	(1) DOES BETTER	(2) DOES THE SAME	(3) DOES WORSE
7. Getting along with friends			
8. Getting along with brothers and sisters			
9. Getting along with you			
10. Getting along with other adults			
11. Dressing themselves			

DIRECTIONS: Mark an "X" in front of the answer you choose for each question.

12. If you had any other children of the right age, would you enter them in the Pre-Kindergarten Program?

1__Yes
2__No
3__Don't know

13. Would you tell other parents that they should enter their children in the Pre-Kindergarten Program?

1__Yes
2__No
3__Don't know

14. How often do you visit the school where your child takes Pre-Kindergarten classes?

1__Daily
2__Often
3__Sometimes
4__Never

15. Has your child's Pre-Kindergarten teacher ever visited your home?

1__Yes
2__No
3__Don't know

16. Has a social worker or family worker ever visited your home?

1__Yes
2__No
3__Don't know

17. Where would your Pre-Kindergarten child be during the day if he or she were not in the program at school?

1__In a nursery school or Head Start center
2__At home
3__With relatives
4__With friends
5__In a day-care center

18. Are either you or your husband or wife usually home during the day?
1__I am usually at home
2__We both are usually at home
3__Neither of us is usually at home
4__Neither of us is usually at home but another adult is usually present

19. Of the children living with you, how many are younger than your child in the Pre-Kindergarten Program?

1__None
2__One
3__Two
4__Three
5__Four
6__Five or more

20. How many are older than your child in the Pre-Kindergarten Program?

1__None
2__One
3__Two
4__Three
5__Four
6__Five or more

21. Are you the mother, the father, or another relative of the child? (Mark only one answer)

1__Mother
2__Father
3__Another relative
4__Not related to the child

MAKE SURE YOU HAVE ANSWERED ALL QUESTIONS. WHEN YOU HAVE FINISHED THIS FORM, PLEASE GIVE IT TO THE TEACHER.